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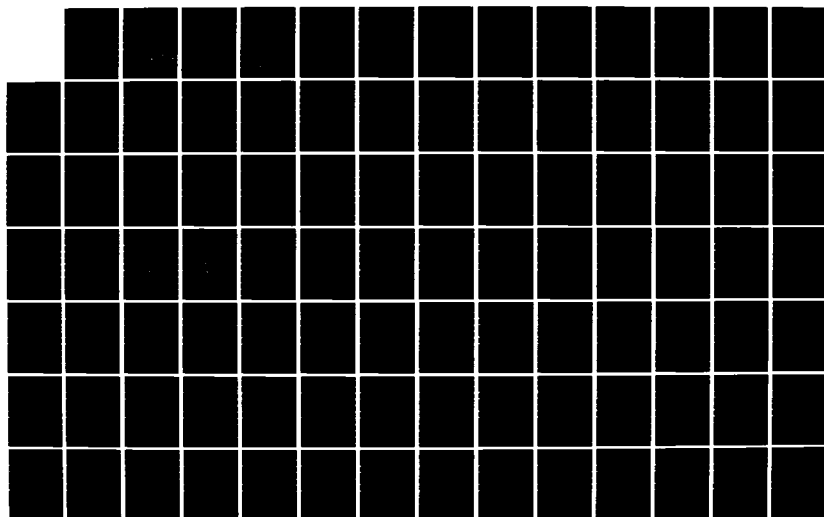
DATA VALIDATION AND SUMMARY FOR THE NRL REMOTE SENSING  
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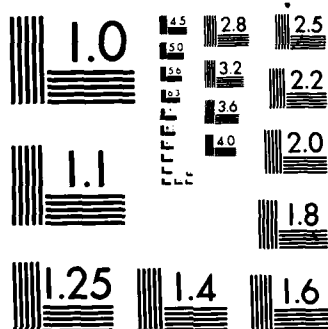
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NRL Memorandum Report 5165

**Data Validation and Summary for the  
NRL Remote Sensing Experiment:  
Phelps Bank, July, 1982**

**Part I: Hydrography**

J. A. C. KAISER

*Ocean Dynamics Branch  
Marine Technology Division*

September 2, 1983

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DATA VALIDATION AND SUMMARY FOR THE  
NRL REMOTE SENSING EXPERIMENT:  
PHELPS BANK, JULY, 1982

Part I: Hydrography

I. INTRODUCTION

For several years, Synthetic Aperture Radar (SAR) images of the sea surface revealed planar signatures which were remarkably similar to the bathymetric contours below the water in depths less than about 30m. Such sea-surface bathymetric signatures were also observed by side-looking airborne radar (SLAR). To address the scientific questions raised by these observations, a multi-institutional program (the Airborne Surveillance Phenomenology Program; ASPP) was established at the Naval Research Laboratory, Washington, DC (The original plans are described in Valenzuela and Chen, 1983.). In July, 1982 as the initial field effort of ASPP, a pilot experiment was conducted southeast of Nantucket Island centered around Asia Rip (40°50'N, 60°20'W). The experiment was to establish techniques for a comprehensive experiment in 1984, to learn about the oceanographic and meteorological environs of Asia Rip, and to obtain a data set for preliminary analysis.

The Nantucket Shoals area was chosen for the experiment because SAR imagery obtained in this area by SEASAT in 1978 (Beal, et al, 1981; p.22) showed a wealth of bathymetric signatures.

During the pilot experiment, meteorological, radar and wave buoy data were gathered. A hydrographic survey of the area was made with a Neil-Brown conductivity-temperature-depth (CTD) profiler as time permitted. Forty-one casts were obtained supplemented by 29 T-11 expendable bathythermograph (XBT) probe drops. The data was confined to the tessera

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40°30' to 41°10'N and 68°55' to 69°45'W. The data was obtained in two segments: 11 to 14 and 17 to 21 July, 1982. This report summarizes the hydrographic situation in the operational area during the experiment based primarily on the CTD data. The data has been corrected for temporal changes during the survey period and adjusted for tidal displacements. In appendices, the CTD and XBT casts are plotted and average CTD data in 1 meter bins are tabulated.



## II. INSTRUMENTATION

The hydrographic situation at Nantucket Shoals was primarily derived from casts made with a conductivity-temperature-depth (CTD) profiling instrument. Expendable bathythermograph (XBT) probes were also dropped to obtain additional temperature profiles.

### A. CTD Instrument

The CTD was manufactured by Neil Brown Instrument Systems and is very similar to their Mark III instrument. The instrument measures each channel of data at a 31 Hertz rate. The electrical conductivity of the water is determined by a four-electrode cell 3 cm long. The temperature is measured by both a platinum resistance element (time constant .5sec) and a thermistor with a time constant of about .05sec. The analog signal from each temperature sensor is combined so that the platinum element provides long term stability and accuracy and the thermistor provides fast response. The pressure is read by a strain gauge sensor. The conductivity, temperature and pressure signals are digitized by three separate 16-bit-plus-sign digitizers and mixed into a digital data stream. The digital data is then transmitted up the hydrowire in frequency-shifted-key (FSK) format using 5 and 10 Hz frequencies. This FSK data stream is converted to TTY-compatible digital data to provide a serial data stream. It is also unmixed and converted to TTY-compatible format to provide a parallel digital data stream and it is digital-to-analog converted to provide parallel analog signals. (Brown and Morrison, 1978, provide details of the CTD instrument).

The serial digital data is logged on an HP-1000 computer through the general purpose interface bus onto 800 bpi 9-track tape. The

serial FSK data is also recorded on a high quality audio recorder (7.5 ips) to provide backup recording. The parallel analog signals are plotted on a 2-channel X-Y-Y' recorder to provide real time monitoring.

The inaccuracies, resolution, and total noise of the CTD channels are in Table 2.1. The inaccuracies are based on the calibration history of the instrument. The system noise is the white noise floor of each channel and the resolution is the digital least count. An evaluation of the CTD characteristics will be found in Kaiser and Clamons, 1983. The instrument used in this experiment is referred to as CTD-II in that report.

#### B. XBT Instrument

The XBT probes used for this experiment were standard Sippican Corporation (Marion, Mass.) type T-11 fine structure XBT's. These probes have a nominal accuracy and resolution of  $0.1^{\circ}\text{C}$ . The probes free fall in the water, and knowing the fall rate equation, their depth-time dependence can be determined. The average fall rate for T-11 probes is 1.75 m/sec. Their nominal depth accuracy is 2%.

Normally the XBT data are recorded on an HP-1000 computer using a digital multimeter. Some were, but computer malfunction required the post cruise manual digitization of the XBT charts on a digitizing table. This does not significantly change the accuracy and resolution of the final digital XBT data.

Table 2.1. CTD System Characteristics

<u>Channel</u>	<u>Resolution</u>	<u>Inaccuracy</u>	<u>System Noise</u>
Temperature, °C	.0005	.005	.0002
Conductivity, mmho/cm	.001	.005	.0004
Pressure, dbar	.025	1.6(.2)*	.02

\*This is over the total range of 1600 dbar. With zero correction, over the 0-100 dbar range the inaccuracy is .2 dbar.

### C. Navigation

The primary navigation aid was two Northstar 7000 Loran-C systems. These have a nominal accuracy of 0.1 km in the Nantucket Shoals area due to the excellent Loran coverage there. The time delays and calculated latitude and longitude information from the Loran-C sets were logged on an HP-1000 computer and updated every minute. The complete time series of navigation for this experiment will be found in Kaiser and Munch, 1983. The position for each cast was determined at the time the CTD or XBT entered the water. In most cases the CTD casts were less than 600 sec in duration and the XBT drops required less than 50 sec.

### III. DATABASE

The data base used here consists of 41 CTD casts and 29 XBT profiles. The geographical distribution of these are shown in Fig. 3.1 with the lowering or drop number. The CTD and XBT logs are in Tables 3.1 and 3.2 respectively.

The CTD cast depths and water depths are in Table 3.1. For most of the casts we tried to keep the CTD about 5 m above the bottom, but this varies; we did not have a bottom finder on the CTD. The actual bottom depths were determined from a Raytheon precision depth recorder.

CTD lowerings 7-13 and 27-34 were recorded on audio tape but inadvertently the tapes were erased. Since the casts were also plotted on an analog recorder, the analog traces were hand digitized on a digitizing table.

XBT drops 14-23 were to determine the existence of a weak east-west front. XBT drops 24-32 were to resurvey the same front about 1/2 tidal cycle later.

To convert from Julian day to calendar day, the following correspondence applies: JD 192 is July 11; JD 198 is July 17; and JD 202 is July 21.

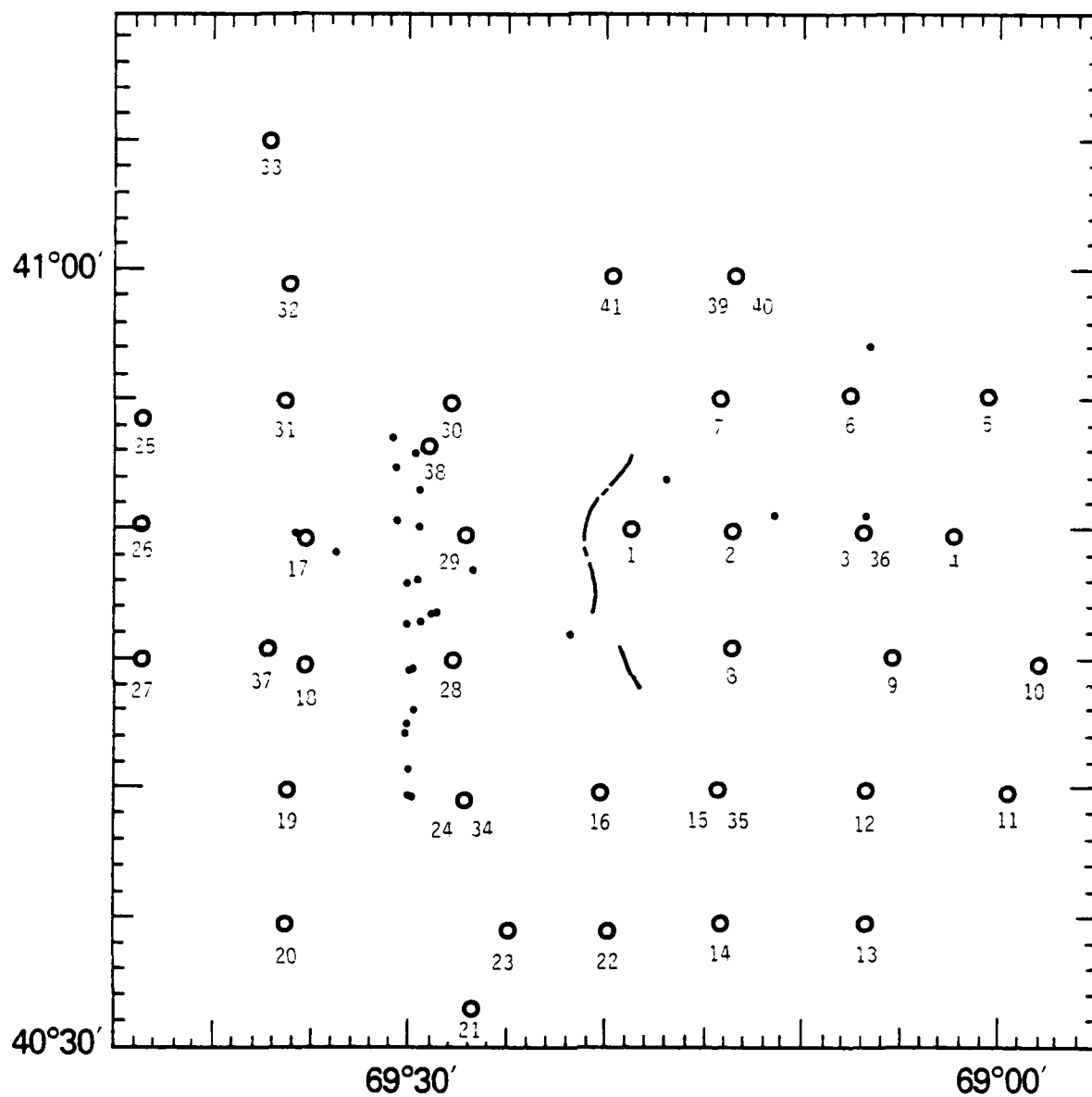


Fig. 3.1. Location of CTD casts (O) and XBT drops (•) with their identifiers. The 20 m isobath is included.

TABLE 3.1. CTD CASTS

DAY-TIME GMT	LOW #	LATITUDE N	LONGITUDE W	CAST DEPTH	WATER DEPTH M	HAND DIGITIZED
192-2329	1	40°49.22'	69°17.77'	51	55	
193-0021	2	40°49.84'	69°13.31'	55	61	
193-0104	3	40°49.85'	69°07.09'	66	65	
193-0143	4	40°49.81'	69°02.19'	80	84	
193-0250	5	40°54.88'	69° 1.15'	79	80	
193-0314	6	40°55.01'	69° 8.00'	68	74	
193-0348	7*	40°54.96'	69°14.01'	62	65	X
193-2212	8	40°44.56'	69°13.32'	51	61	X
193-2257	9	40°44.71'	69° 5.17'	69	71	X
193-2339	10	40°44.90'	68°58.15'	62	72	X
194-0017	11	40°40.23'	68°59.52'	62	66	X
194-0101	12	40°39.84'	69°06.64'	63	78	X
194-0139	13	40°35.16'	69°06.79'	77	80	X
194-0222	14	40°34.96'	69°13.95'	56	60	
194-0303	15	40°39.66'	69°13.93'	54	58	
194-0343	16	40°40.06'	69°19.90'	49	55	
194-2218	17	40°50.04'	69°35.04'	35	39	
194-2256	18	40°45.24'	69°35.86'	40	45	
194-2333	19	40°40.25'	69°36.09'	45	50	
195-0011	20	40°35.16'	69°36.16'	59	62	
195-0112	21	40°32.04'	69°27.20'	55	59	
195-0204	22	40°34.79'	69°20.06'	55	60	
195-0246	23	40°34.85'	69°26.53'	49	54	
195-0330	24	40°39.58'	69°26.71'	50	55	
198-0739	25	40°54.29'	69°42.95'	28	32	
198-0815	26	40°50.26'	69°43.05'	35	38	
198-0853	27	40°45.13'	69°42.95'	39	42	X
198-1000	28	40°45.06'	69°27.35'	48	50	X
198-1031	29	40°49.87'	69°27.26'	47	50	X
198-1101	30	40°54.87'	69°27.27'	22	26	X
198-1156	31	40°55.12'	69°35.73'	38	40	X
198-1228	32	40°59.88'	69°35.77'	38	43	X
198-1302	33	41°04.92'	69°35.96'	21	31	X
198-1957	34	40°39.99'	69°27.12'	53	55	X
198-2157	35	40°40.44'	69°12.92'	62	66	

TABLE 3.1. CTD CASTS (Cont)

DAY-TIME GMT	LOW #	LATITUDE N	LONGITUDE W	CAST DEPTH	WATER DEPTH M	HAND DIGITIZED
200-1410	36	40°50.30'	69°07.16'	69	73	
200-2235	37	40°45.42'	69°36.15'	36	40	
200-2351	38	40°53.10'	69°20.96'	36	45	
201-1630	39	40°59.29'	69°13.49'	31	70	
201-1645	40	40°59.14'	69°13.19'	67	69	
	41	41°00.15'	69°19.58'	47	49	

\*Lowering 7 was machine digitized to 44 m and hand digitized to 61 m

TABLE 3.2. XBT DROPS

DAY-TIME GMT	DROP NO	LATITUDE N	LONGITUDE W	WATER DEPTH M	
191-0946	7	40°48.50'	69°26.81'	-	
191-1022	8	40°47.00'	69°29.00'	-	
192-1215	9	40°46.96'	69°29.04'	-	Bad
192-1845	10	40°49.96'	69°18.94'	-	
193-1935	11	40°52.00'	69°16.79'	53	
194-1820	12	40°49.92'	69°34.64'	35	Questionable
195-1515	13	40°47.42'	69°21.73'	33	
198-1730	14	40°53.71'	69°30.91'	37	Front transect No. 1
198-1745	15	40°52.5 '	69°30.60'	37	Front transect No. 1
198-1800	17	40°50.5 '	69°30.19'	37	Front transect No. 1
198-1815	18	40°48.1 '	69°30.02'	44	Front transect No. 1
198-1830	19	40°46.5 '	69°29.95'	44	Front transect No. 1
198-1845	20	40°44.8 '	69°29.93'	44	Front transect No. 1
198-1900	21	40°42.8 '	69°30.00'	48	Front transect No. 1
198-1915	22	40°41.0 '	69°29.96'	48	Front transect No. 1
198-1930	23	40°40.0 '	69°29.92'	48	Front transect No. 1
198-2355	24	40°39.7 '	69°29.8 '	43	Front transect No. 2
199-0010	25	40°42.4 '	69°29.8 '	48	Front transect No. 2
199-0025	26	40°43.3 '	69°29.8 '	44	Front transect No. 2
199-0035	27	40°44.9 '	69°29.8 '	46	Front transect No. 2
199-0050	28	40°46.6 '	69°29.6 '	45	Front transect No. 2
199-0105	29	40°48.3 '	69°29.4 '	43	Front transect No. 2
199-0120	30	40°50.14'	69°29.4 '	45	Front transect No. 2
199-0135	31	40°51.9 '	69°29.4 '	38	Front transect No. 2
199-0145	32	40°53.0 '	69°29.5 '	34	Front transect No. 2
199-2025	33	40°50.7 '	69°07.6 '	70	
200-0305	34	40°57.1 '	69° 6.6 '	75	
200-1200	35	40°50.5 '	69°11.2 '	70	
202-1800	36	40°49.1 '	69°33.7 '	40	



#### IV. DATA PROCESSING

##### A. CTD Data

The CTD data was transcribed from audio tape to 9-track 800 bpi tape by an HP-1000 computer. 31 data scans/second were logged. These data were digitally processed before plotting or other processing. The data was scanned and, starting at a minimum pressure (0 dbar), all data scans were discarded if  $(p_{n+1} - p_n) < 0$ , where  $n$  is the data scan number and  $p$  the pressure. Then the data was wild point edited. All data scans in which  $p_{n+1} - p_n > K_1$  were discarded. Then all data points which had

$$|(T_{n+1} - T_n)/(p_{n+1} - p_n)| > K_2$$

$$|(C_{n+1} - C_n)/(p_{n+1} - p_n)| > K_3$$

were discarded. The  $K_1 - K_3$  are chosen for a particular data set. They represent, respectively, the maximum allowable time derivative of pressure, the pressure derivative of temperature, and the pressure derivative of conductivity. For this data we chose  $K_1 = .2$  dbar/scan,  $K_2 = 3.^\circ\text{C/dbar}$  and  $K_3 = 2.$  mmho/cm-dbar. These values are small enough so that data at the bottom of a mixed layer will not be discarded.

Density and salinity were then calculated from the edited data. No attempt was made to smooth or lag the temperature vis-a-vis the conductivity to prevent "spiking". The density and salinity algorithms are documented in Rosenblum (1980). The algorithms are based on those of the Woods Hole Oceanographic Institution.

## B. XBT Data

The XBT data were all hand digitized from the standard XBT charts and converted to temperature and depth using the standard Sippican conversions. The data was digitized by measuring the coordinates of significant points. These are points which can be connected linearly and in so doing the reconstructed profile is within  $.1^{\circ}\text{C}$  from the original curve. The digitized data is then reconstructed by linearly interpolating between successive significant points.

## C. Tidal Adjustment of Data

The hydrographic data were obtained throughout the experimental period and at random phases of the tidal cycle, which is semi-diurnal in the area.

Actual tidal ellipses were determined with drifters at 6 and 19 m west and east of Phelps Bank ( $69^{\circ}20'\text{W}$ ) (see Greenewalt and Gordon, 1982). Each tidal ellipse, determined from their measurements and referenced to the maximum flood current at Pollack Rip is plotted in Fig. 4.1. The maximum excursion due to the tides was 6.5 n.mi, while the nominal grid point spacing in the hydrographic survey was 5 n.mi. To accurately plot maps, the lowering locations were all adjusted to a "reference" location in the tidal cycle. It was decided to use the center of the ellipse even though the tidal motion would never bring the water to that point; any point on the ellipse represents an extreme location. The adjustment to each of the 41 lowerings is shown in Fig. 4.2. The points being geographic locations and the circles the adjusted locations.

These tidal corrections were only made to the upper 30 m of the water column. Deeper water most certainly moves in different trajectories

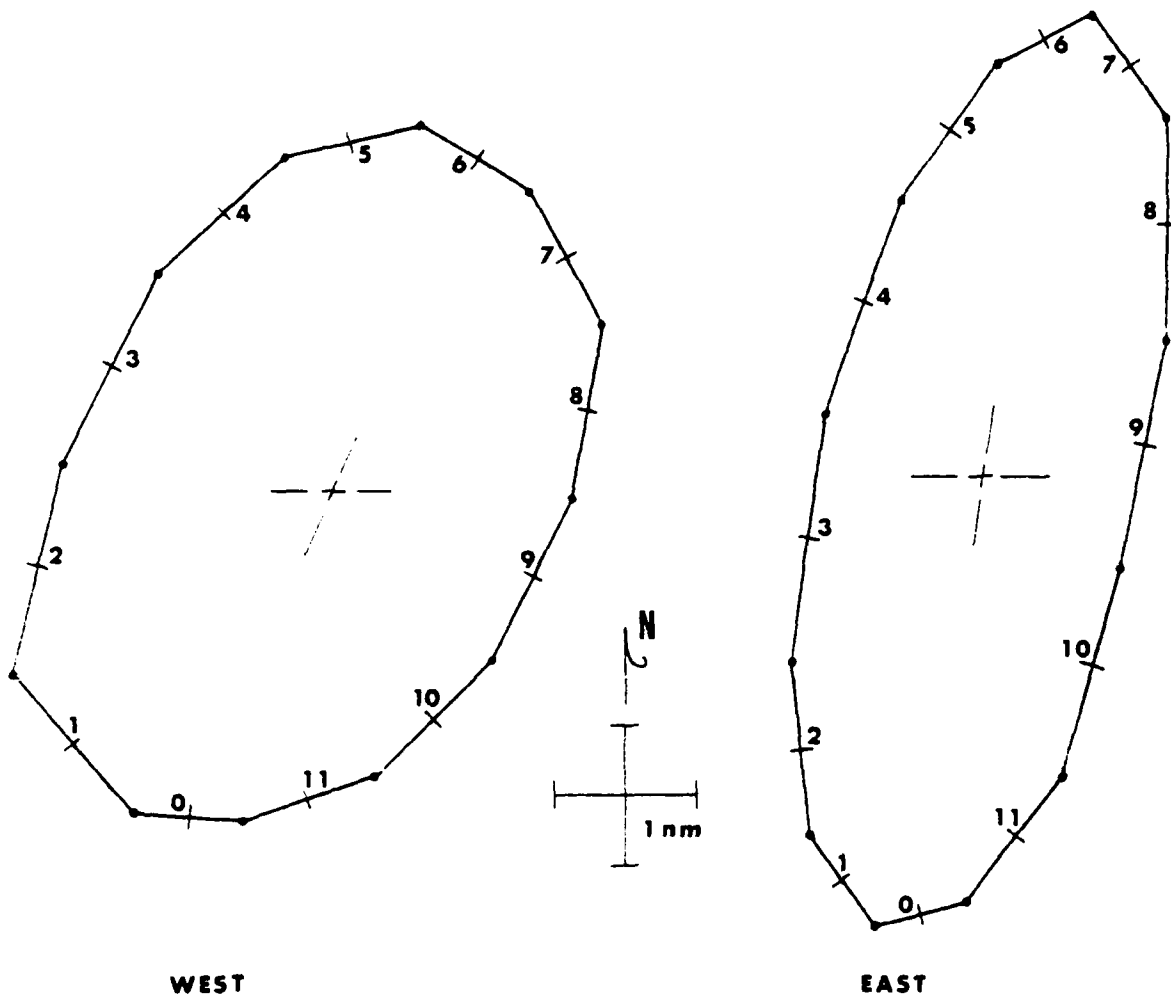


Fig. 4.1. Tidal ellipses west and east of Phelps Bank constructed from the data of Greenewalt and Gordon (1982). The points labelled "0" refer to the maximum flood current at Pollock Rip.

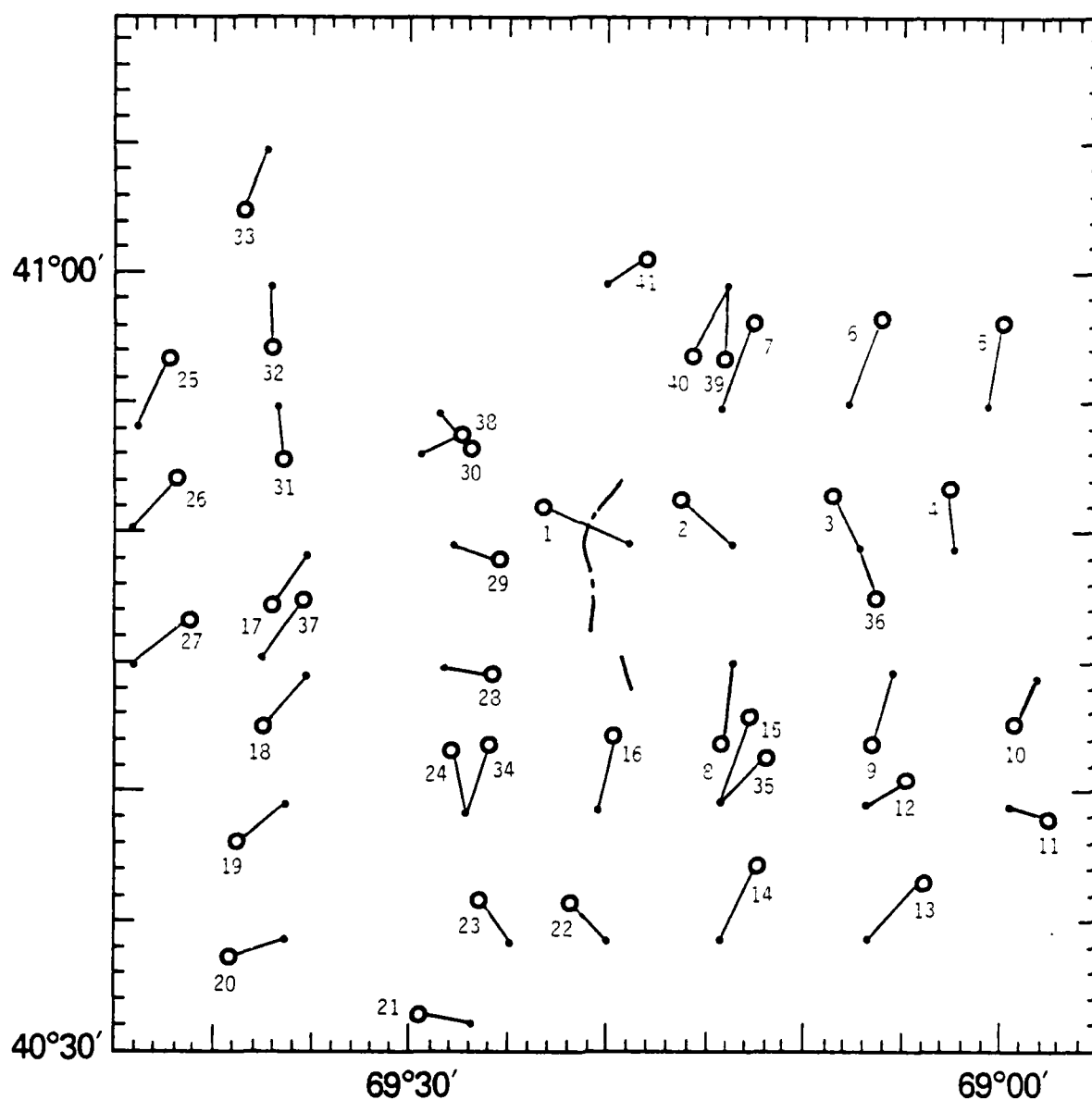


Fig. 4.2. Adjustment to the location of CTD lowerings due to tidal motion. The circle is the adjusted location; the point the geographic location.

due to bathymetric influences. Bottom water probably is almost completely uncoupled from the upper tidal motion.

#### D. Temporal Adjustment of Data:

The hydrographic survey was carried out over a time span of 9 days. A few lowerings were reoccupied during the period and they indicate a definite temporal trend in the deep (below 30 m) water. Above 30 m no trend could be discerned. The trends were obtained by comparing lowerings 3 to 36, 15 to 35, and 24 to 34. These trends are plotted in Fig. 4.3. The temperature trend is most definite; salinity has a weaker trend and sigma-T no trend. The temperature and salinity corrections are  $-.097^{\circ}\text{C}/\text{day}$  and  $-.04^{\circ}/\text{day}$  with no correction is made at 198/0600Z. These temporal corrections are only applied at or below 30 m depth.

#### E. Summary of Corrections:

Both tidal and temporal corrections have been made to the data. The corrections are summarized in Table 4.1.

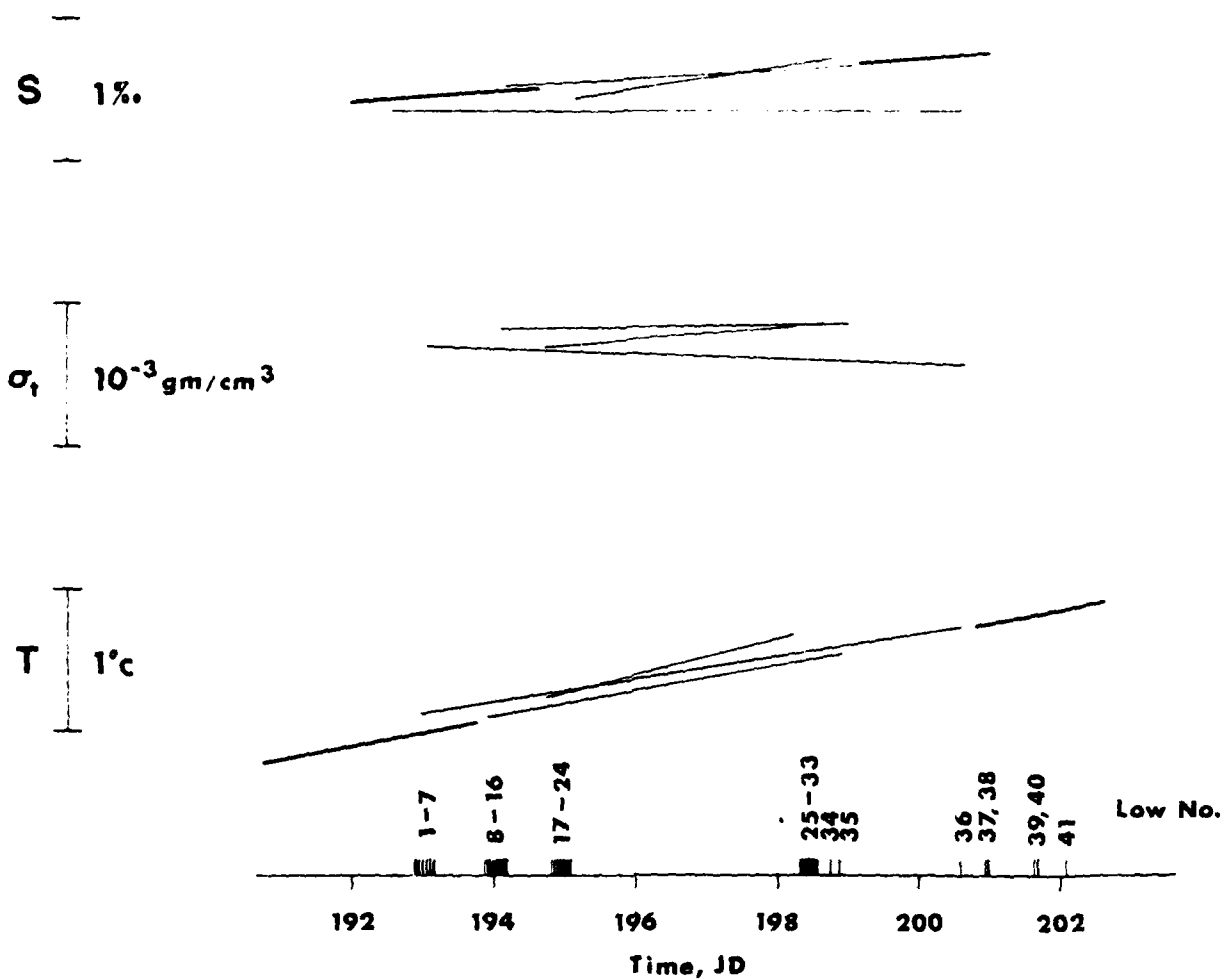


Fig. 4.3. Temporal trends in the salinity, sigma-T and temperature based on reoccupied stations.

TABLE 4.1. CORRECTIONS TO DATA

( $T_i$  - Tidal,  $T_e$  - Temporal)

DEPTH	VARIABLE		
	Temperature	Salinity	Sigma-T
0,m	$T_i$	$T_i$	$T_i$
10,m	$T_i$	$T_i$	$T_i$
20,m	$T_i$	$T_i$	$T_i$
30,m	$T_i, T_e$	$T_i, T_e$	$T_i$
40,m	$T_e$	$T_e$	--
60,m	$T_e$	$T_e$	--
Bottom	$T_e$	$T_e$	--

## V. HYDROGRAPHIC DATA

The hydrographic fields, corrected as described in IV, is mapped at 0, 10, 20, 30, 40, 60 m depths and at the bottom. Temperature, salinity and sigma-T maps have been constructed at each depth (Figs. 5.1 through 5.21). The location of Phelps Bank and Asia Rip are shown as the broken line near 69°20'W. The appropriate isobath is plotted on the 10 m to 60 m charts. This isobath was taken from the Department of Commerce 1:400,000, Georges Bank and Nantucket Shoals chart, July, 1980. The bottom data was from the deepest portion of the lowering, usually within 5 m of the bottom (see Table 3.1). A T-S diagram for each cast was plotted (Appendix A) and then all were combined, Fig. 5.22a. The composite T-S diagram suggests six distinct water masses can be identified. These are delineated in Fig. 5.22b. Note that types A, E and F represent surface water. Types B, C, and D are deep water with type C probably resulting from mixing of types B and D. The locations of these watermass types are shown in Fig. 5.23 and Fig. 5.24. Type C occurs over the shallower water in and around Phelps Bank, a result of tidal mixing across the bank.

Selected temperature profiles from the area are geographically positioned in Fig. 5.25. The regions of surface warming are evident, but mixing between types B, C, D are only evident on the salinity profiles, which are on Fig. 5.26.

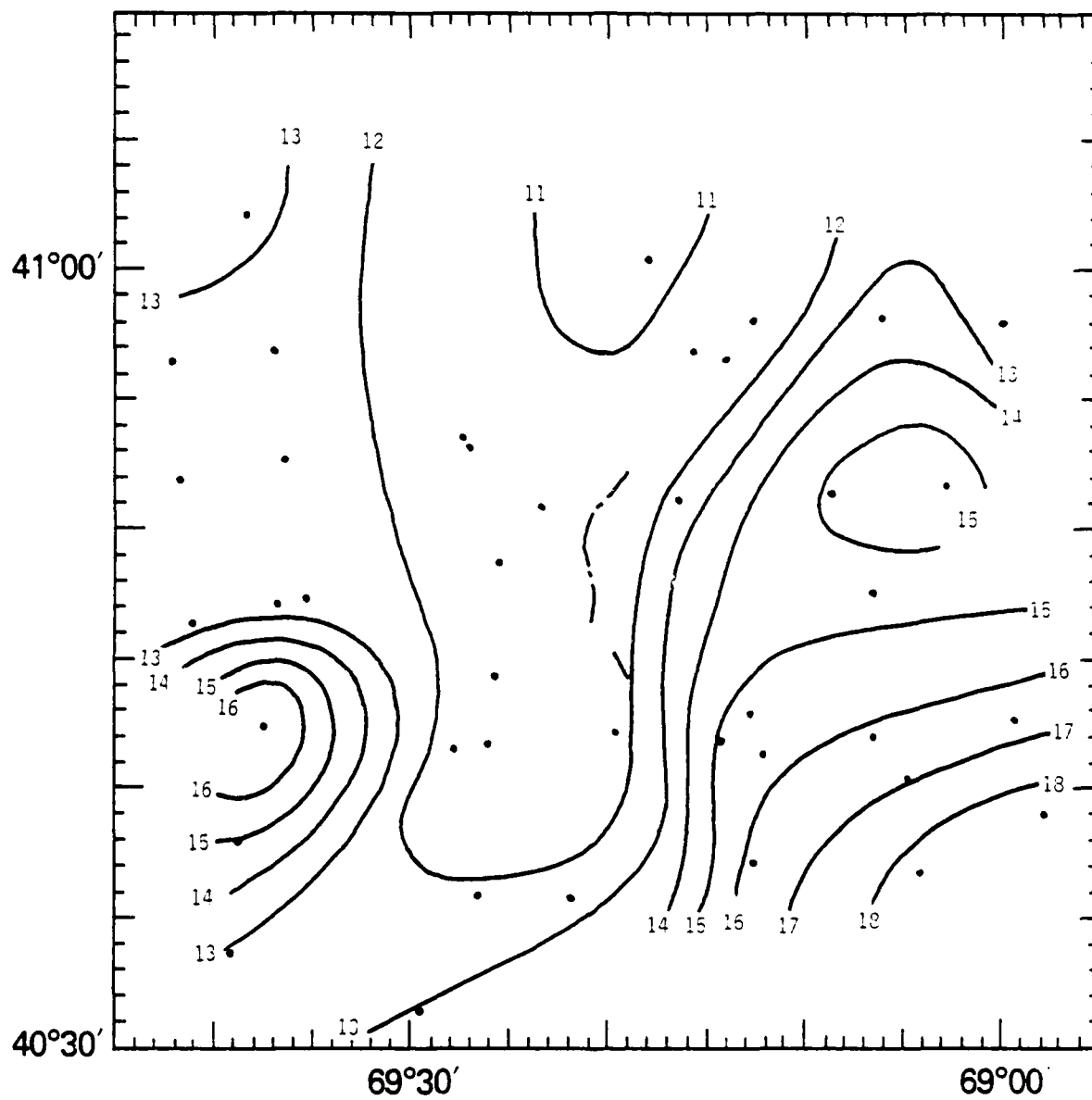


Fig. 5.1. Temperature field at 0 m tidally adjusted.



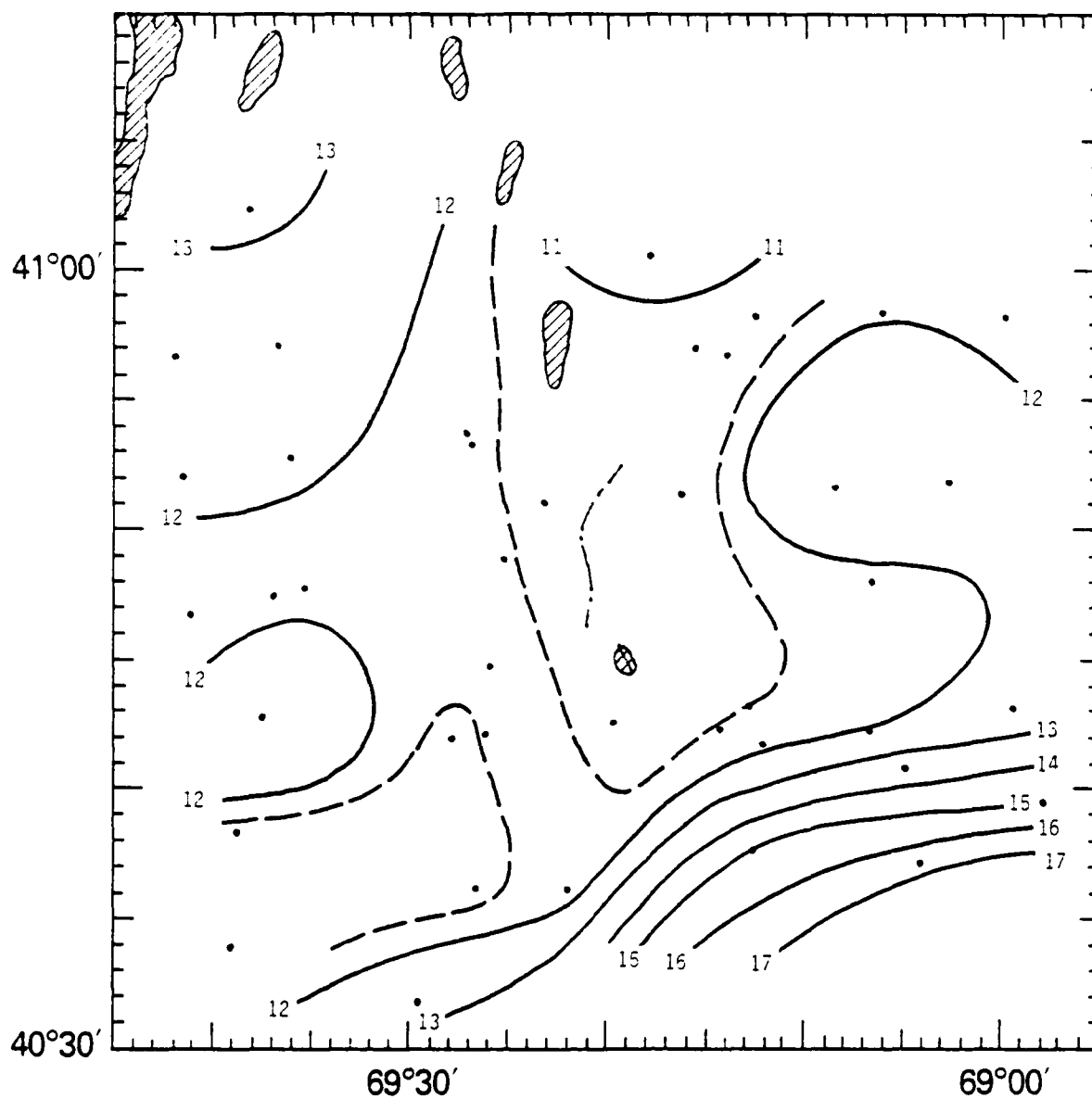


Fig. 5.2. Temperature field at 10 m tidally adjusted.

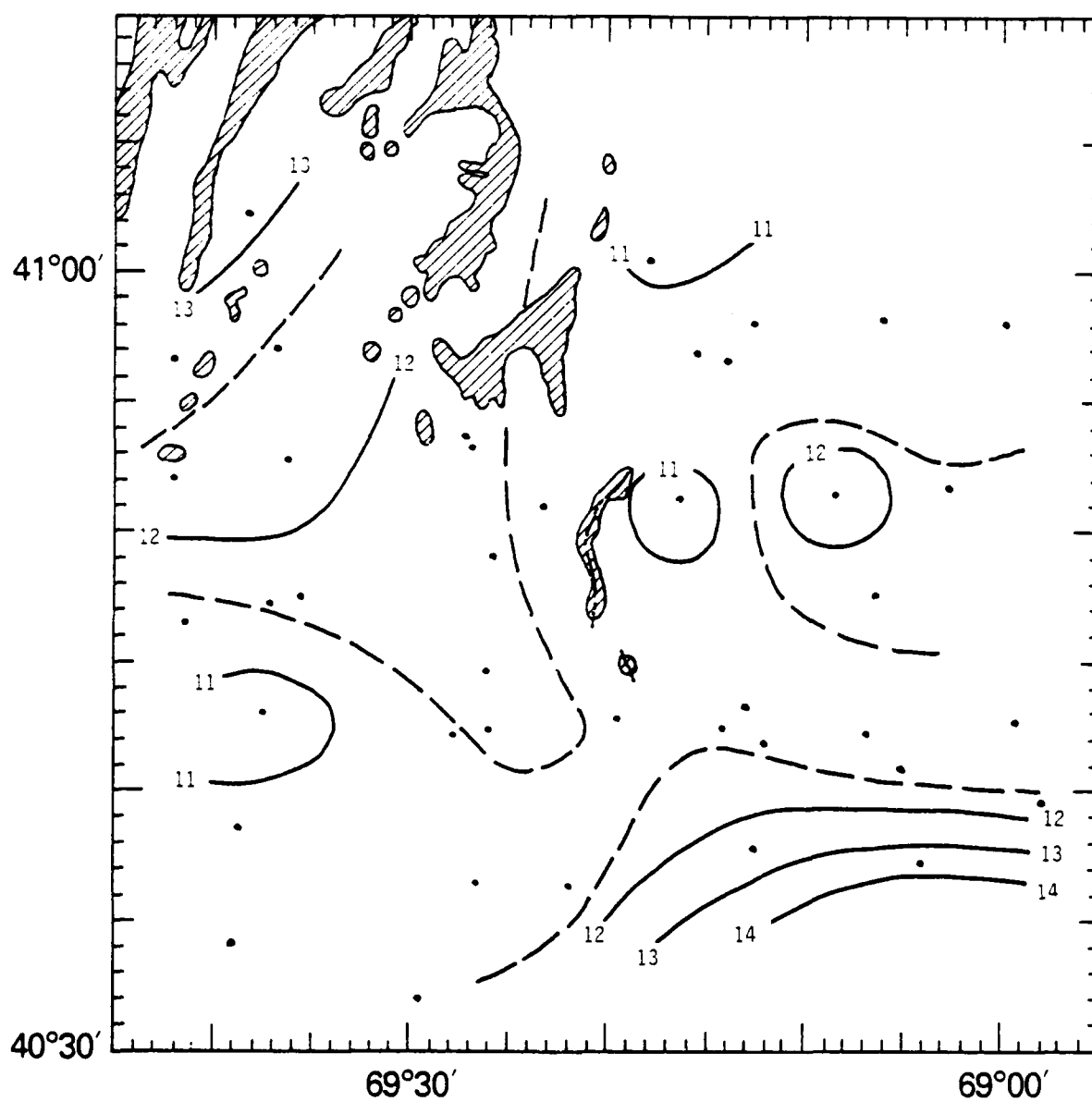


Fig. 5.3. Temperature field at 20 m tidally adjusted.

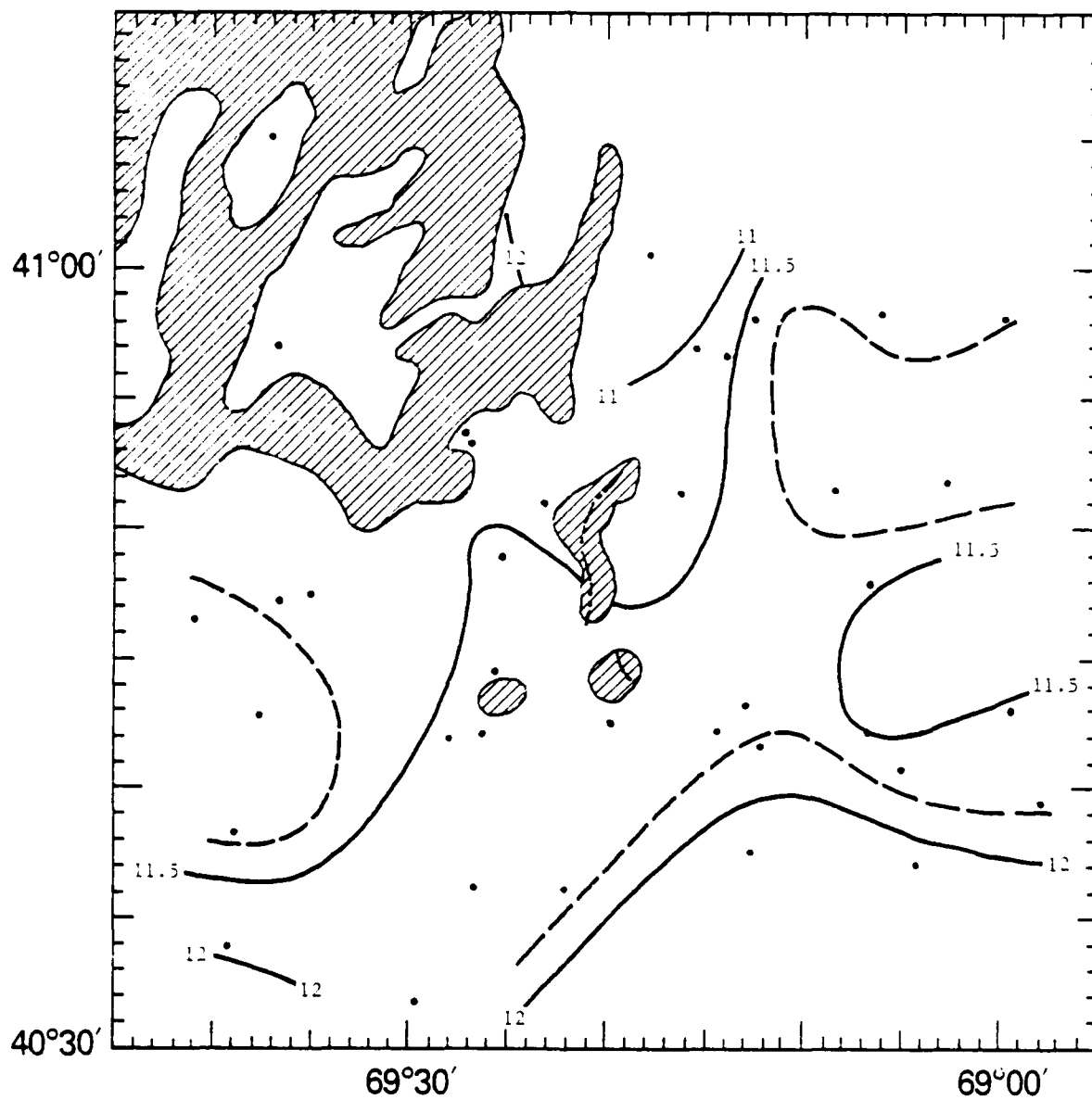


Fig. 5.4. Temperature field at 30 m temporally and tidally adjusted.

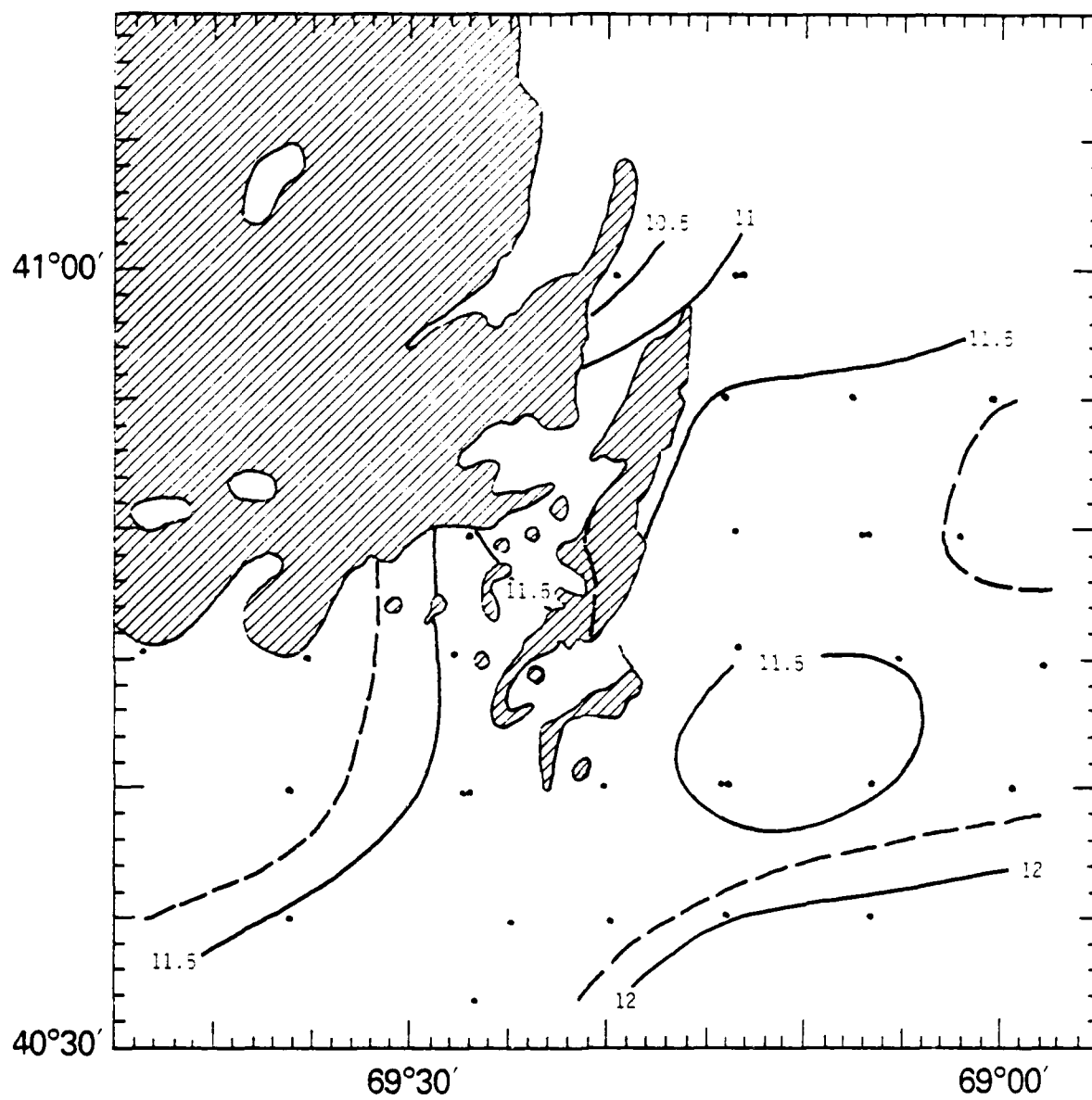


Fig. 5.5. Temperature field at 40 m temporally adjusted.

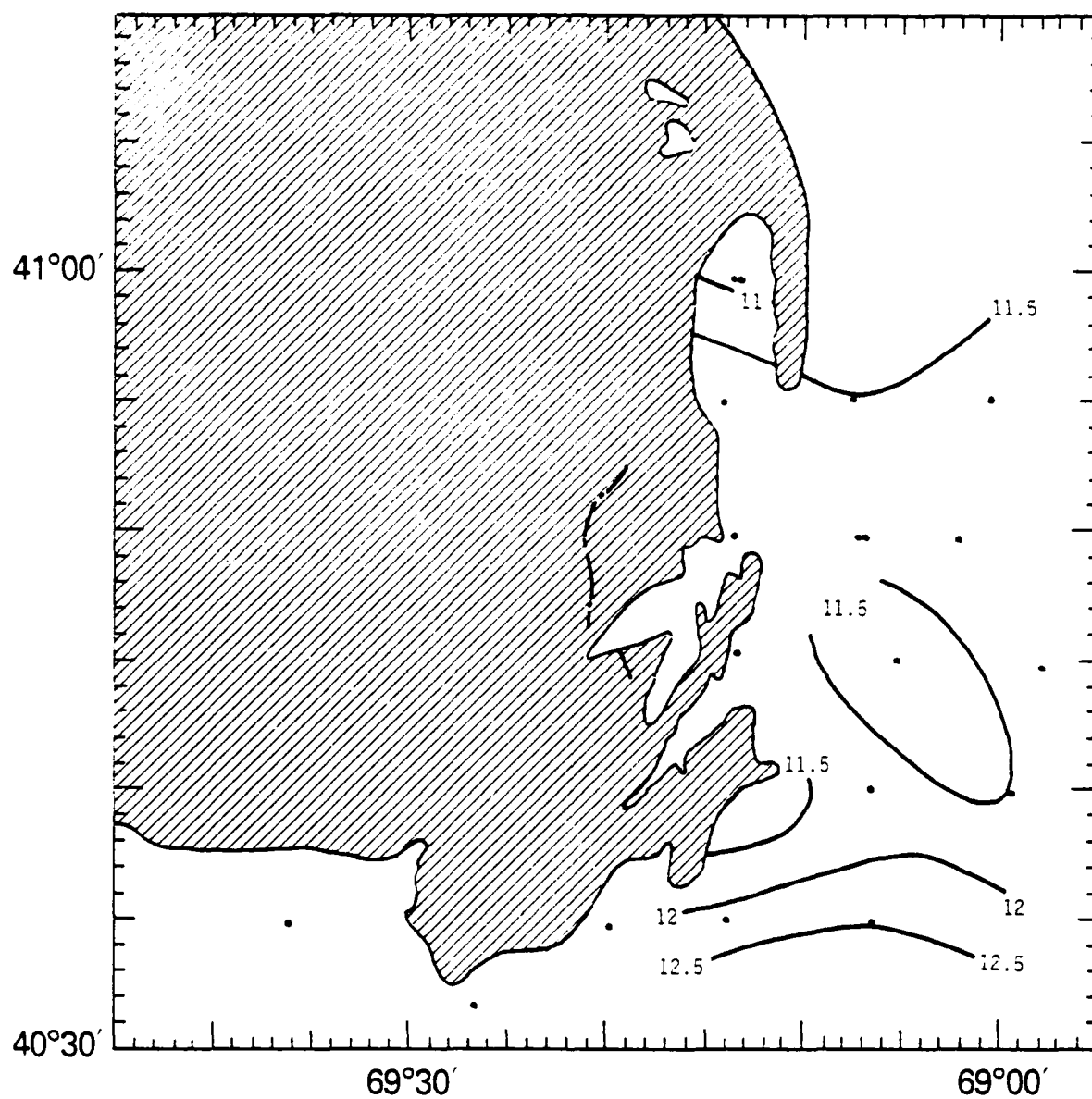


Fig. 5.6. Temperature field at 60 m temporally adjusted.

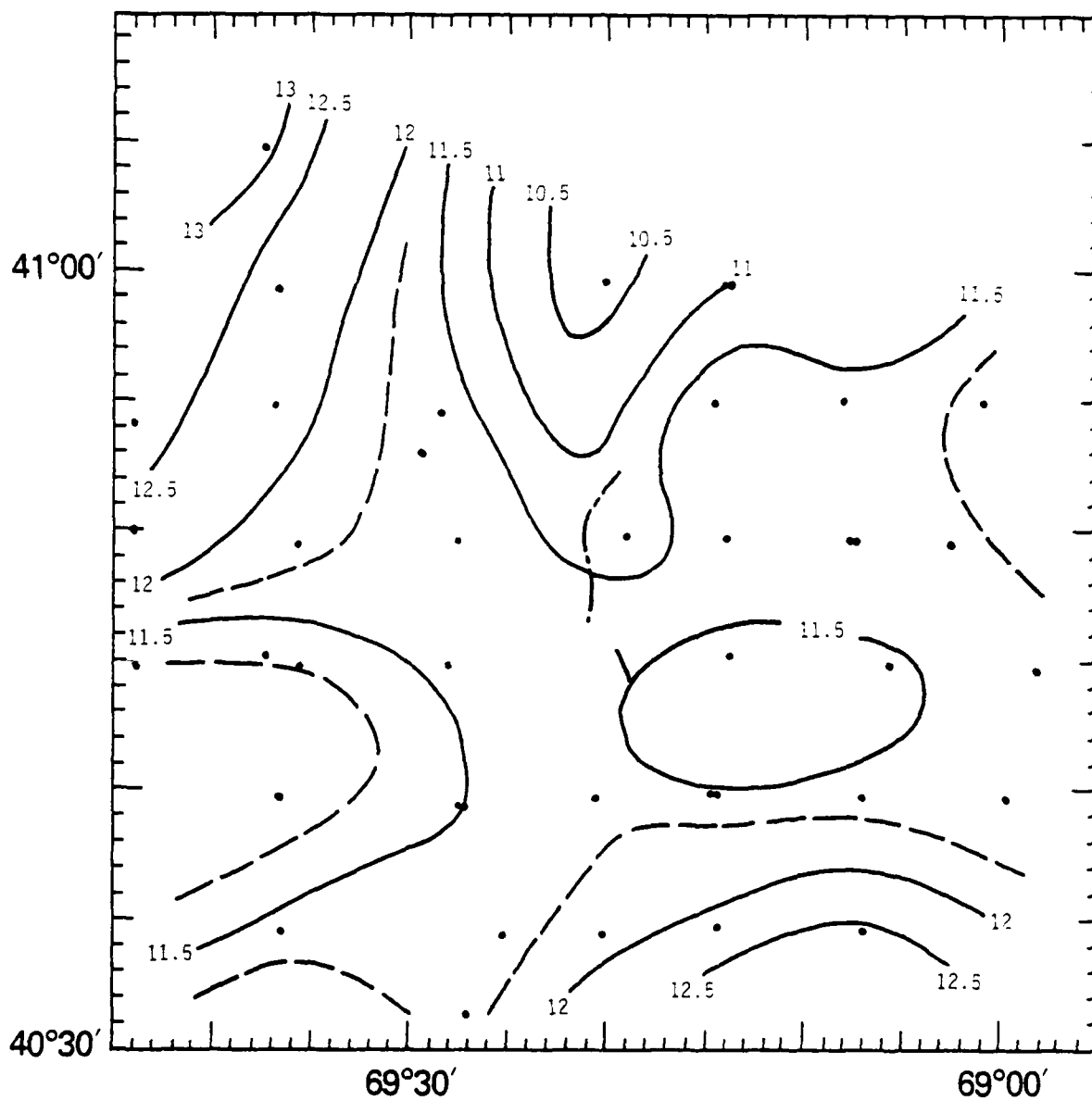


Fig. 5.7. Temperature field at the bottom temporally adjusted.

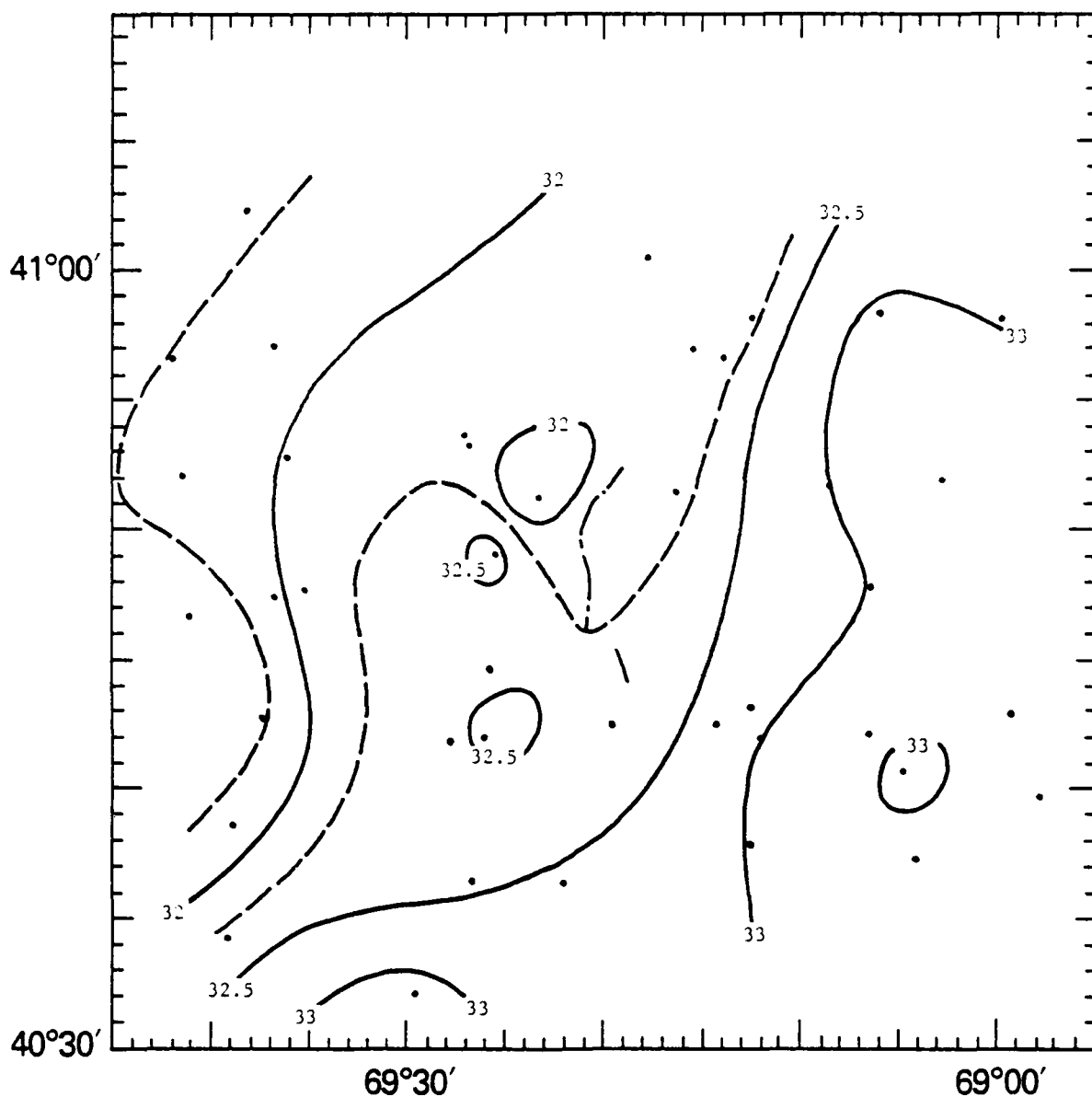


Fig. 5.8. Salinity field at 0 m tidally adjusted.

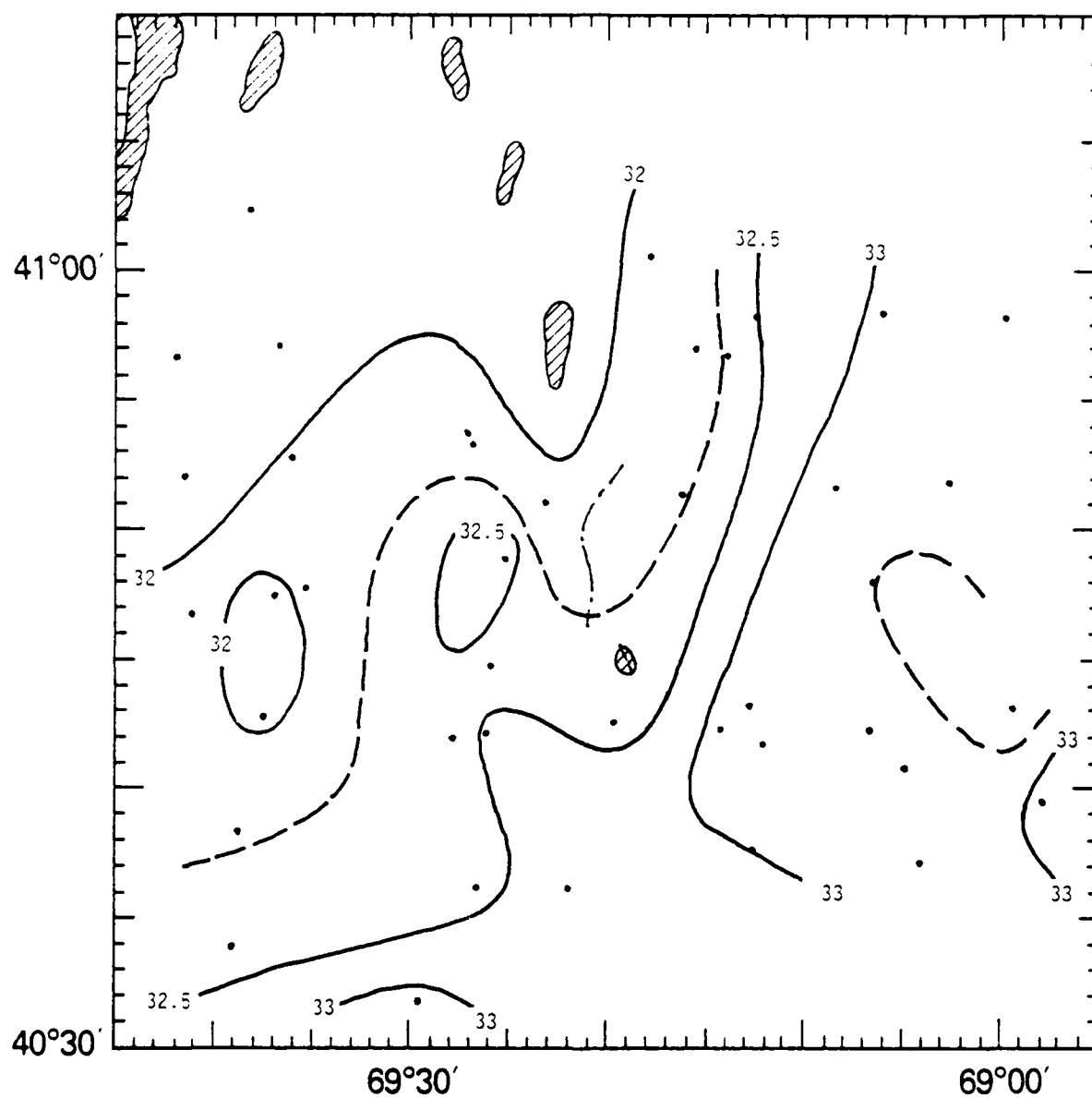


Fig. 5.9. Salinity field at 10 m tidally adjusted.



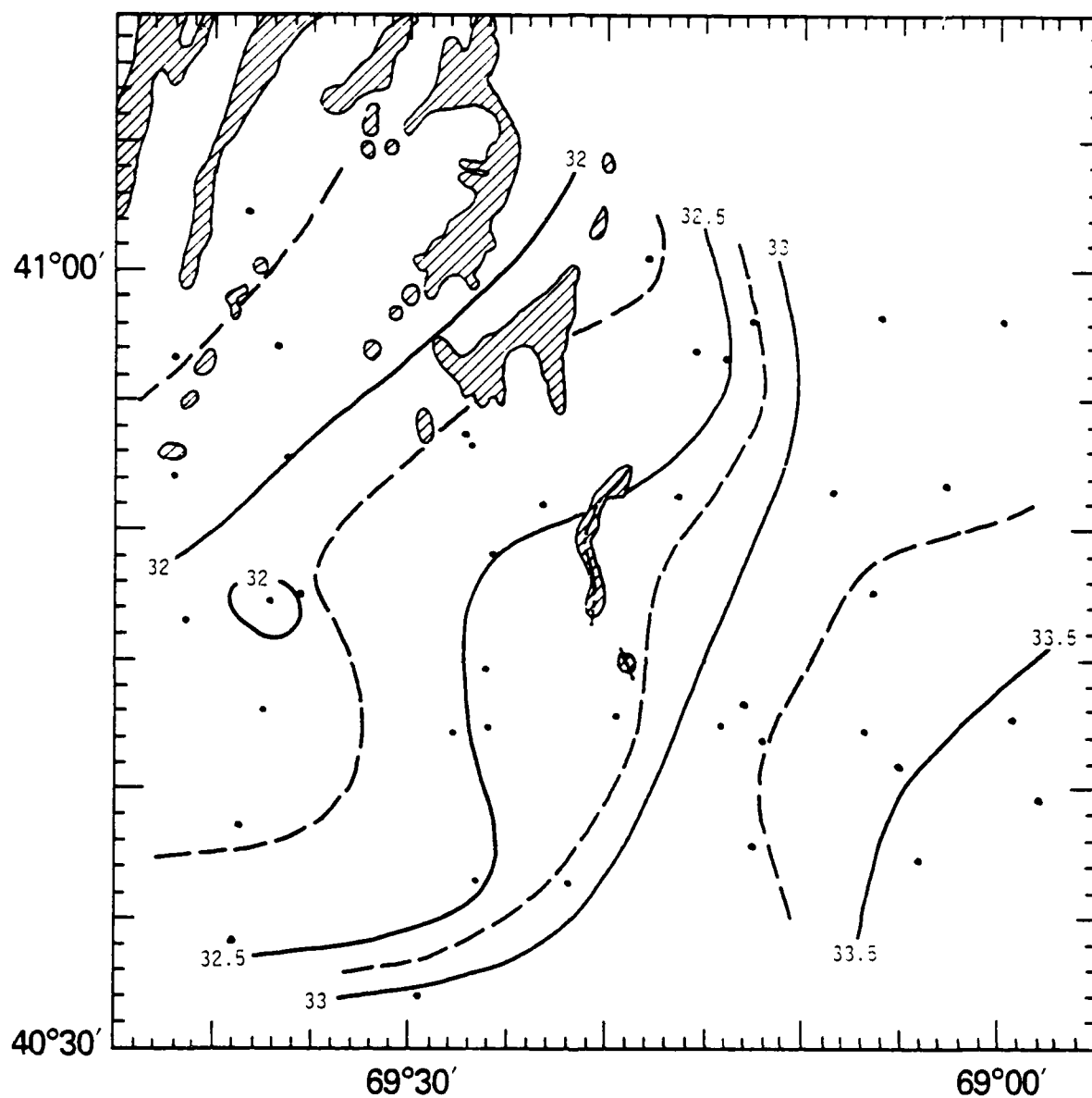


Fig. 5.10. Salinity field at 20 m tidally adjusted.

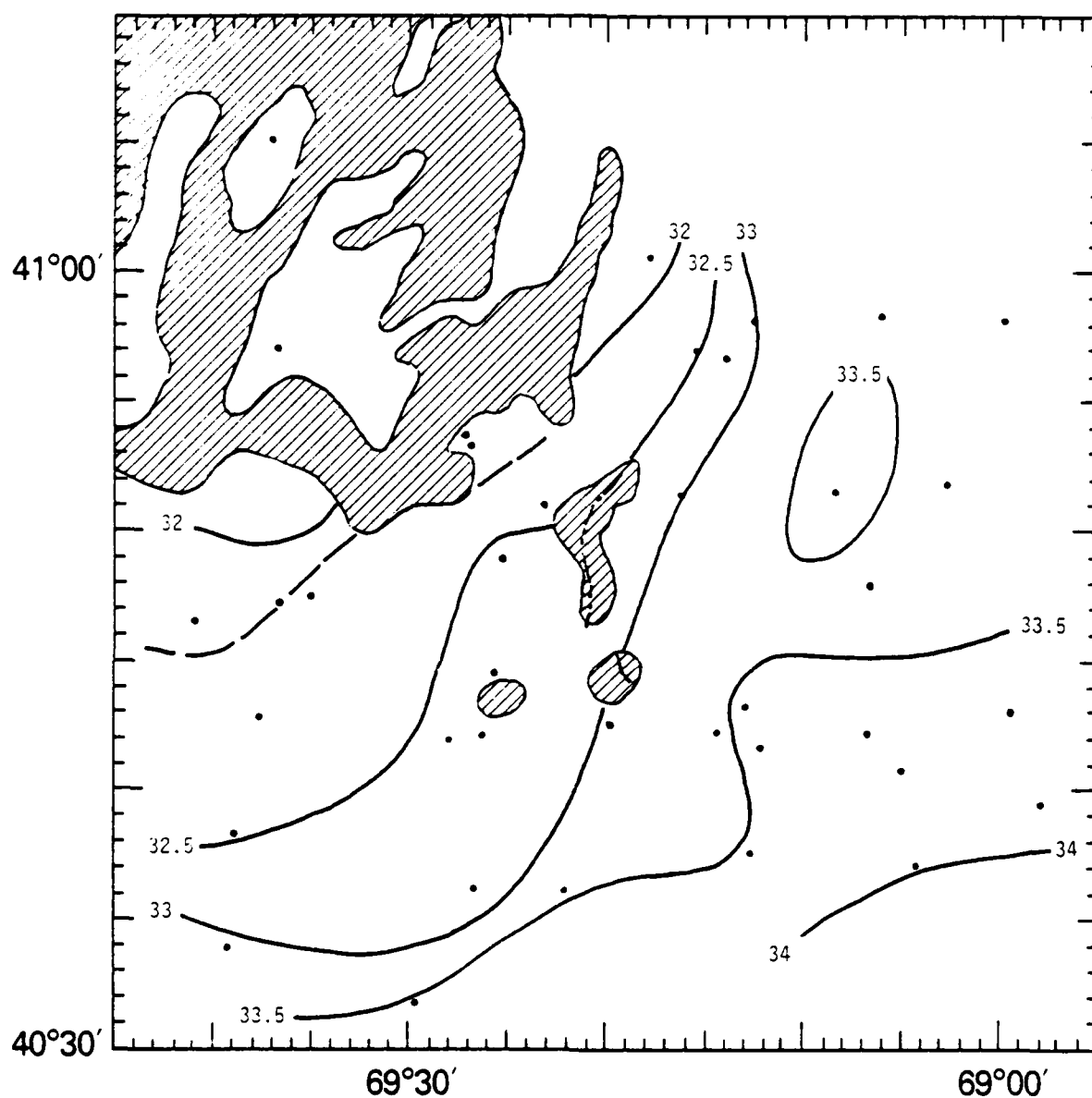


Fig. 5.11. Salinity field at 30 m tidally and temporally adjusted.

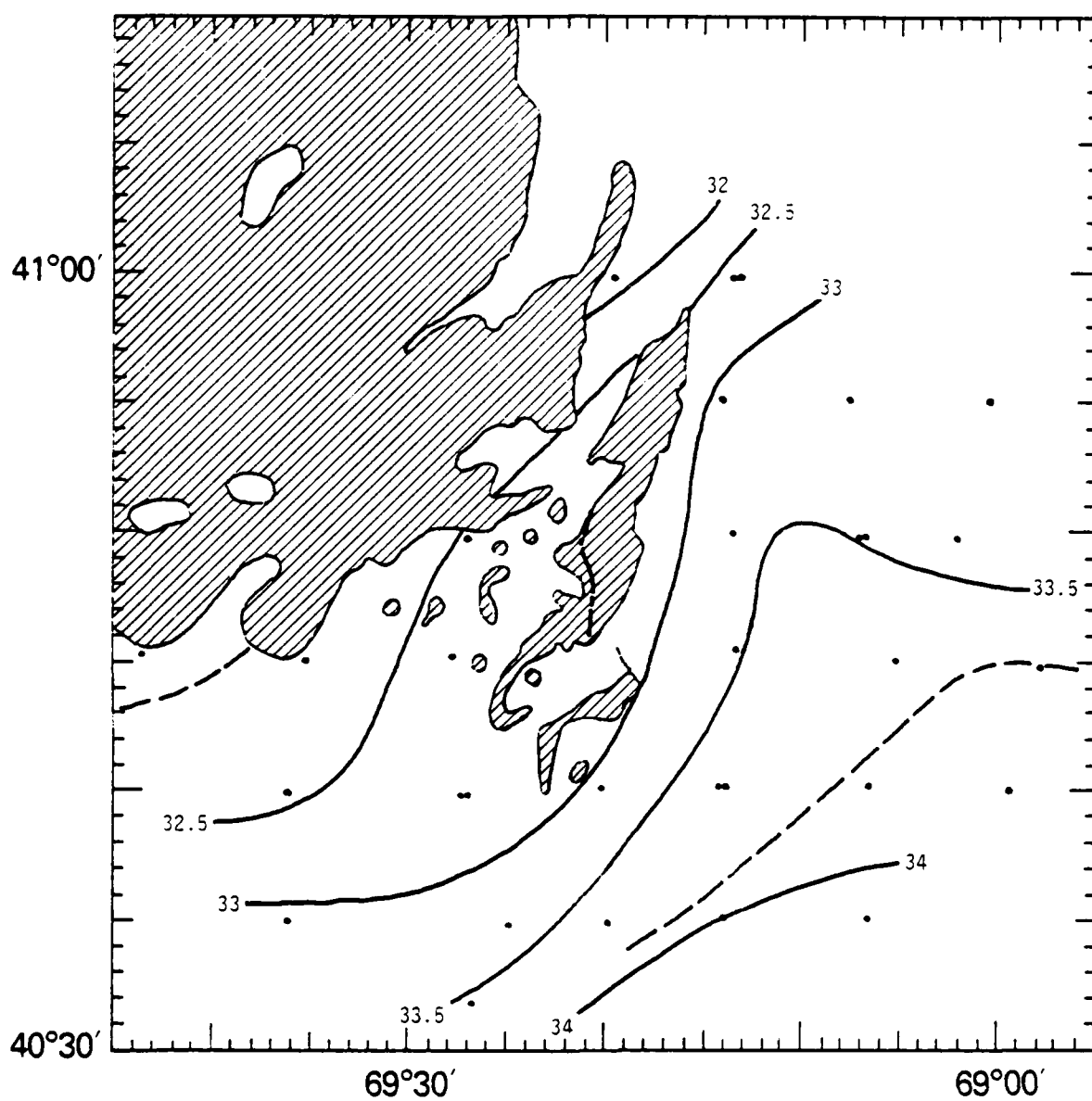


Fig. 5.12. Salinity field at 40 m temporally adjusted.

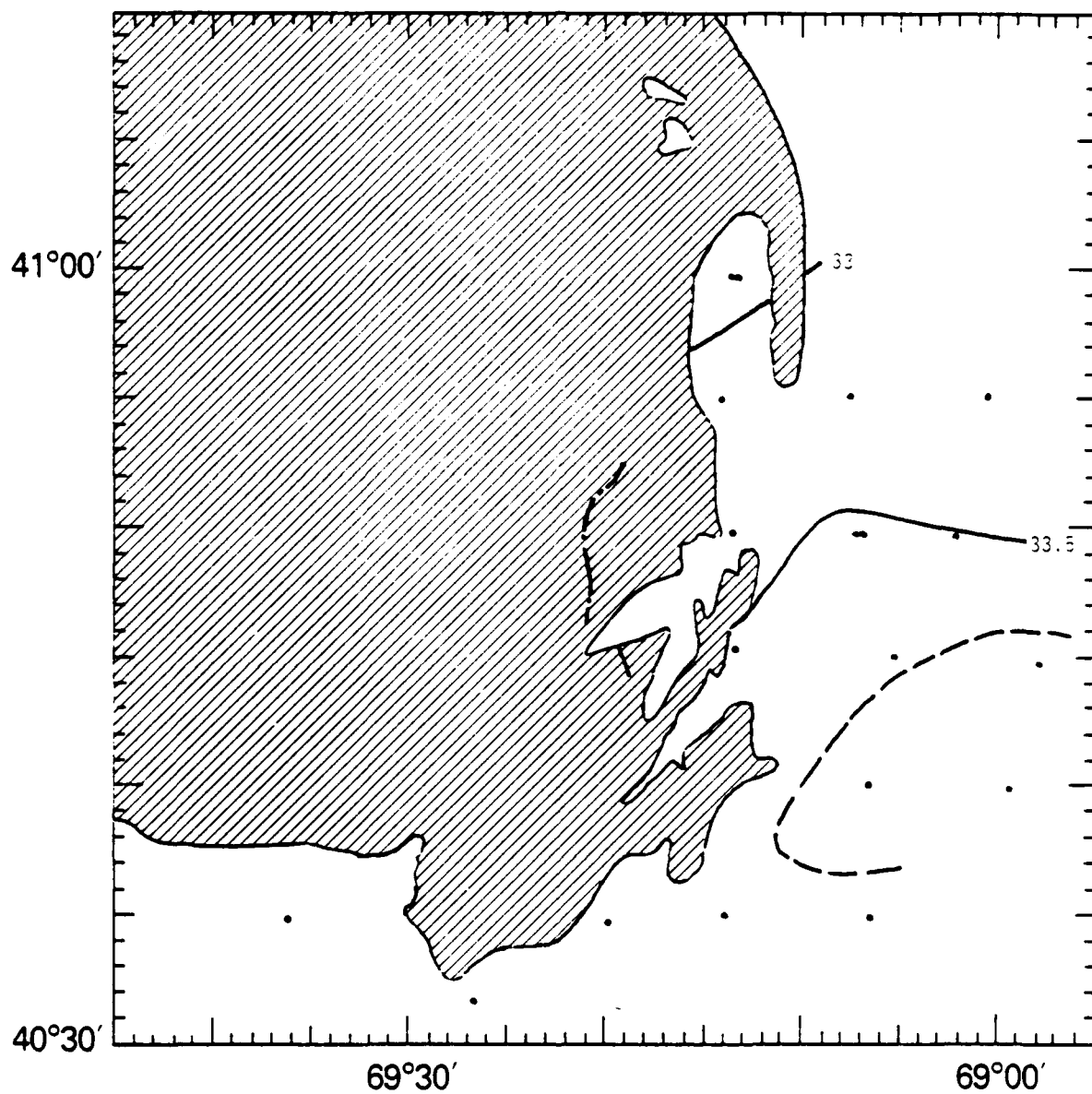


Fig. 5.13. Salinity field at 60 m temporally adjusted.

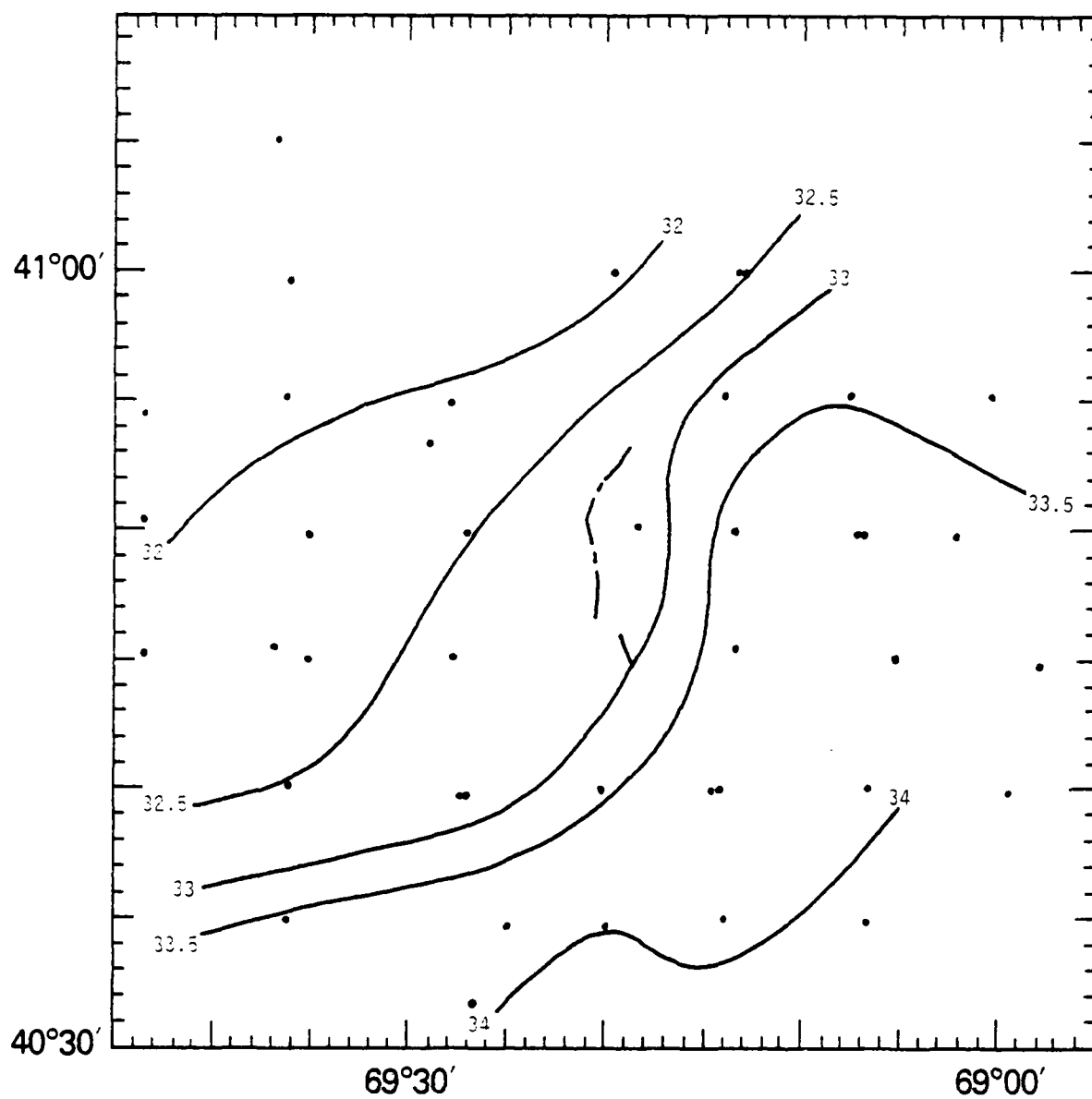


Fig. 5.14. Salinity field at the bottom temporally adjusted.

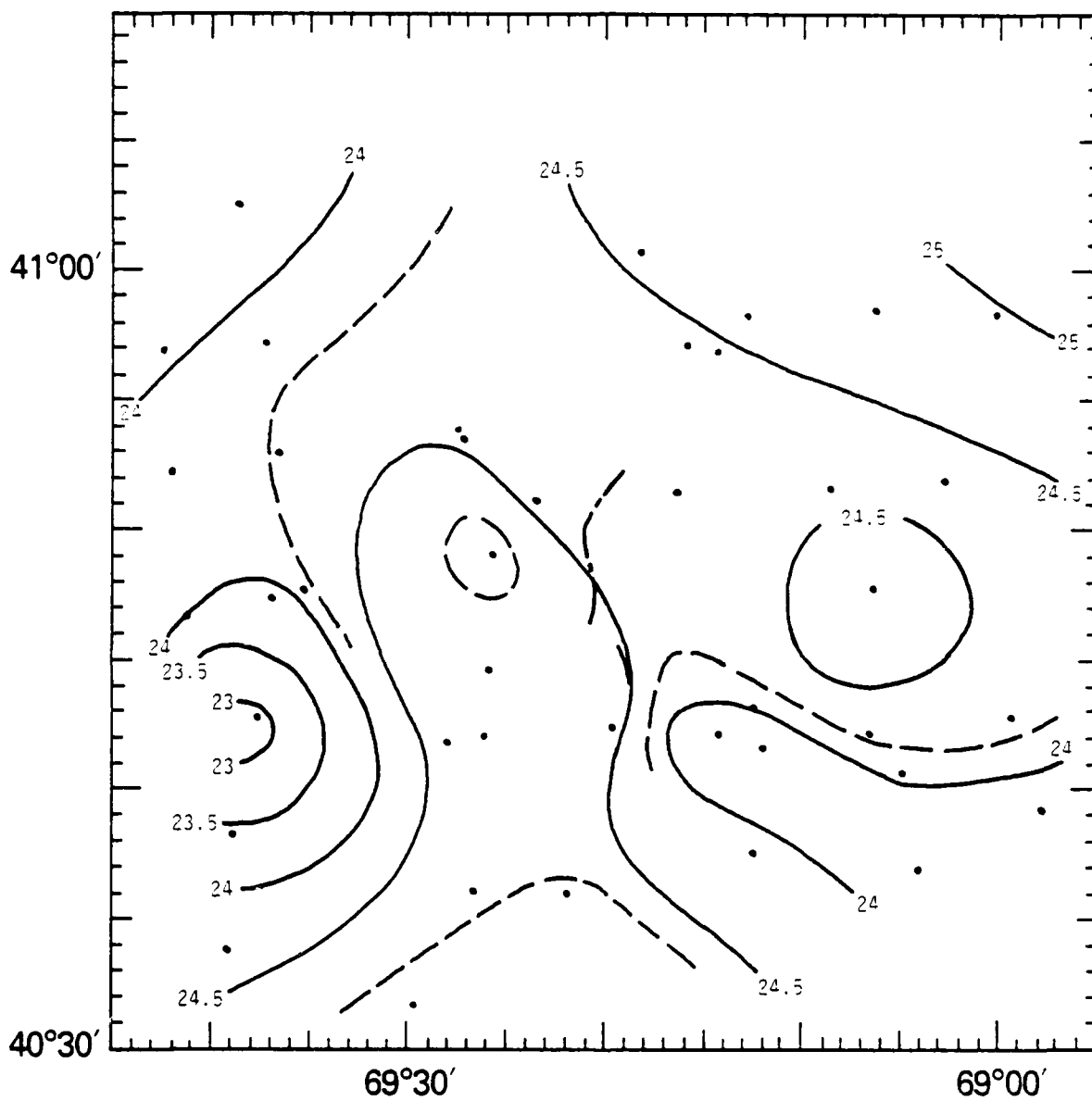


Fig. 5.15. Sigma-T field at 0 m.

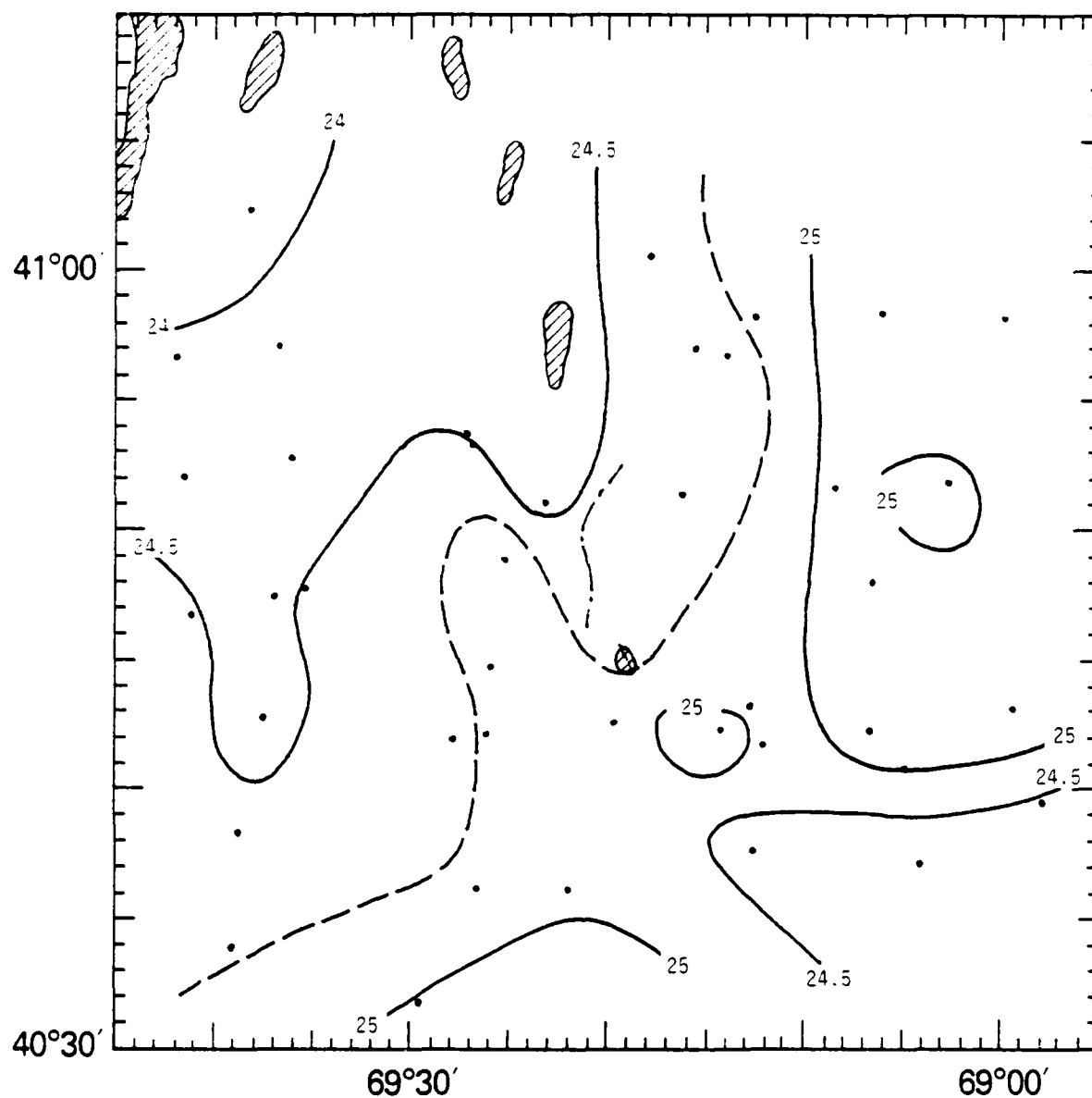


Fig. 5.16. Sigma-T field at 10 m.

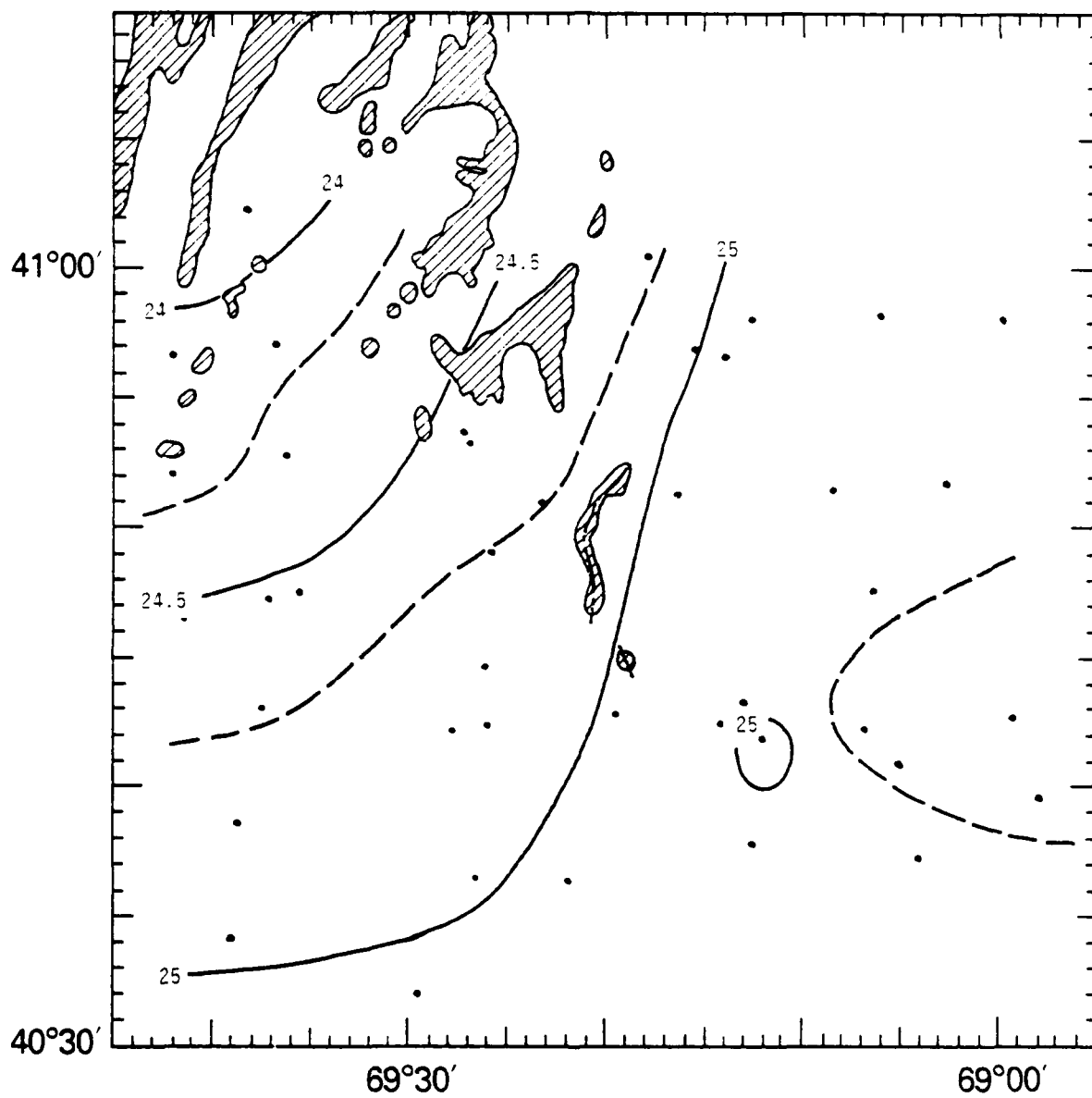


Fig. 5.17. Sigma-T field at 20 m.



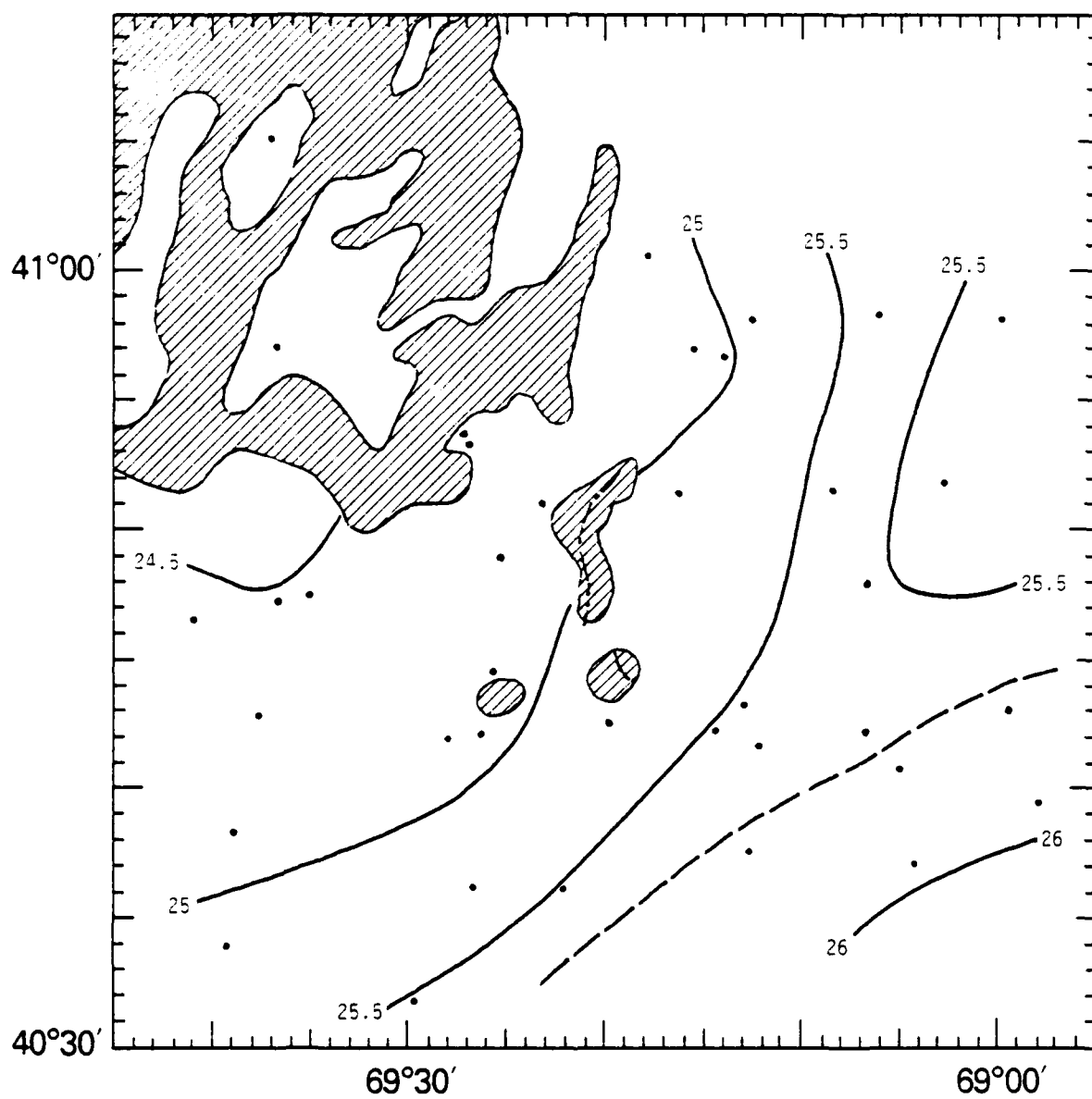


Fig. 5.18. Sigma-T field at 30 m.

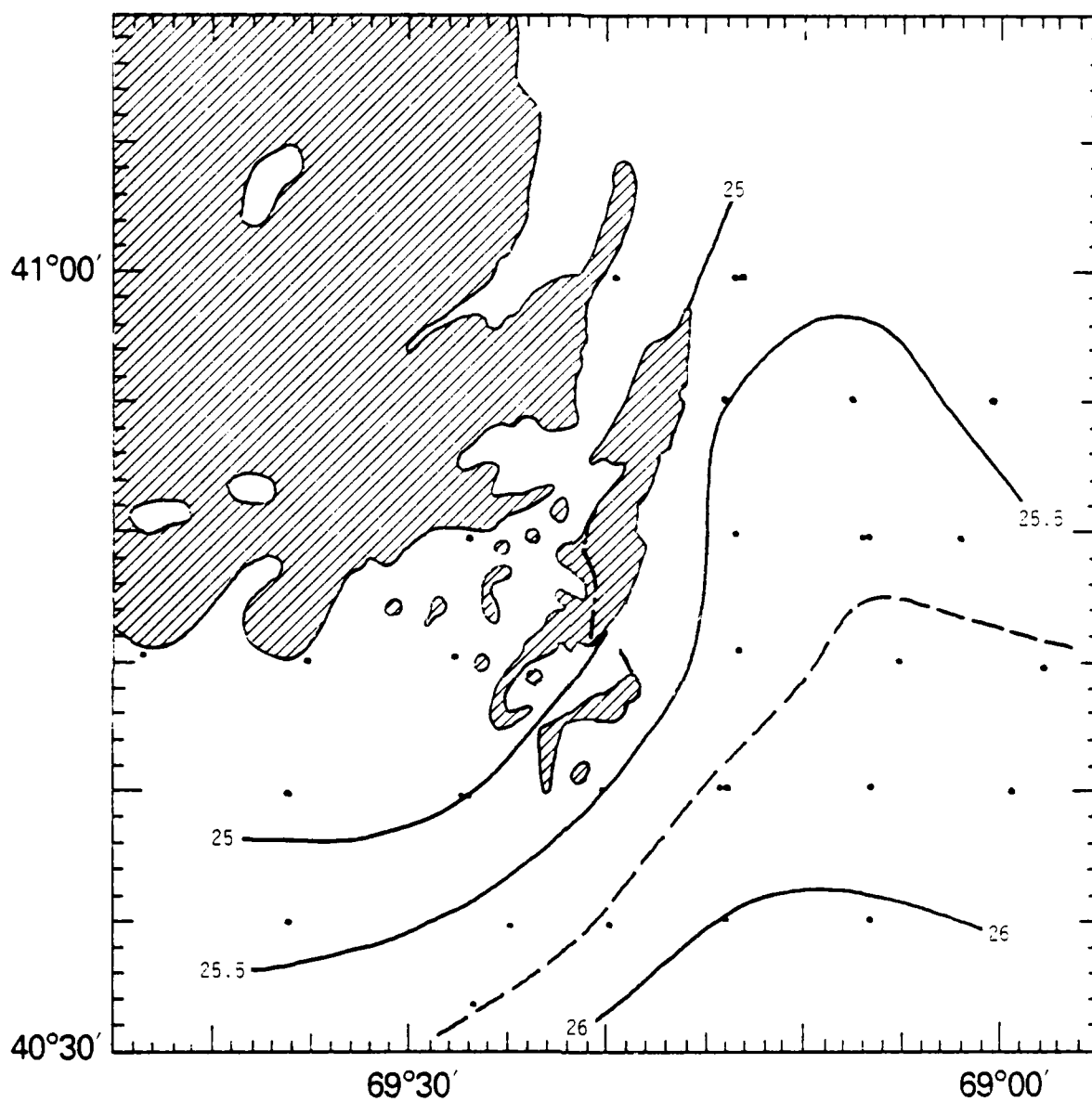


Fig. 5.19. Sigma-T field at 40 m.

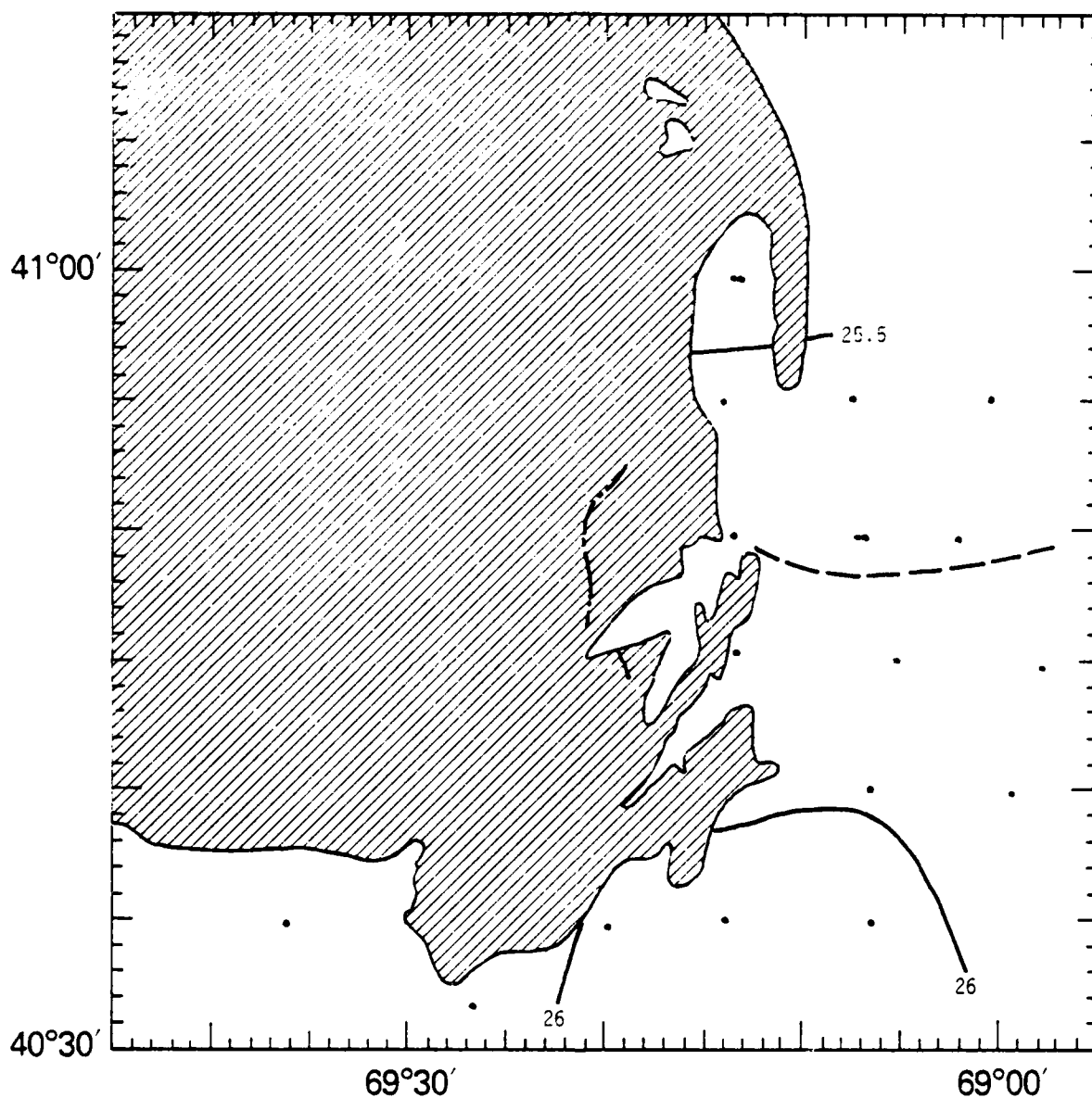


Fig. 5.20. Sigma-T field at 60 m.

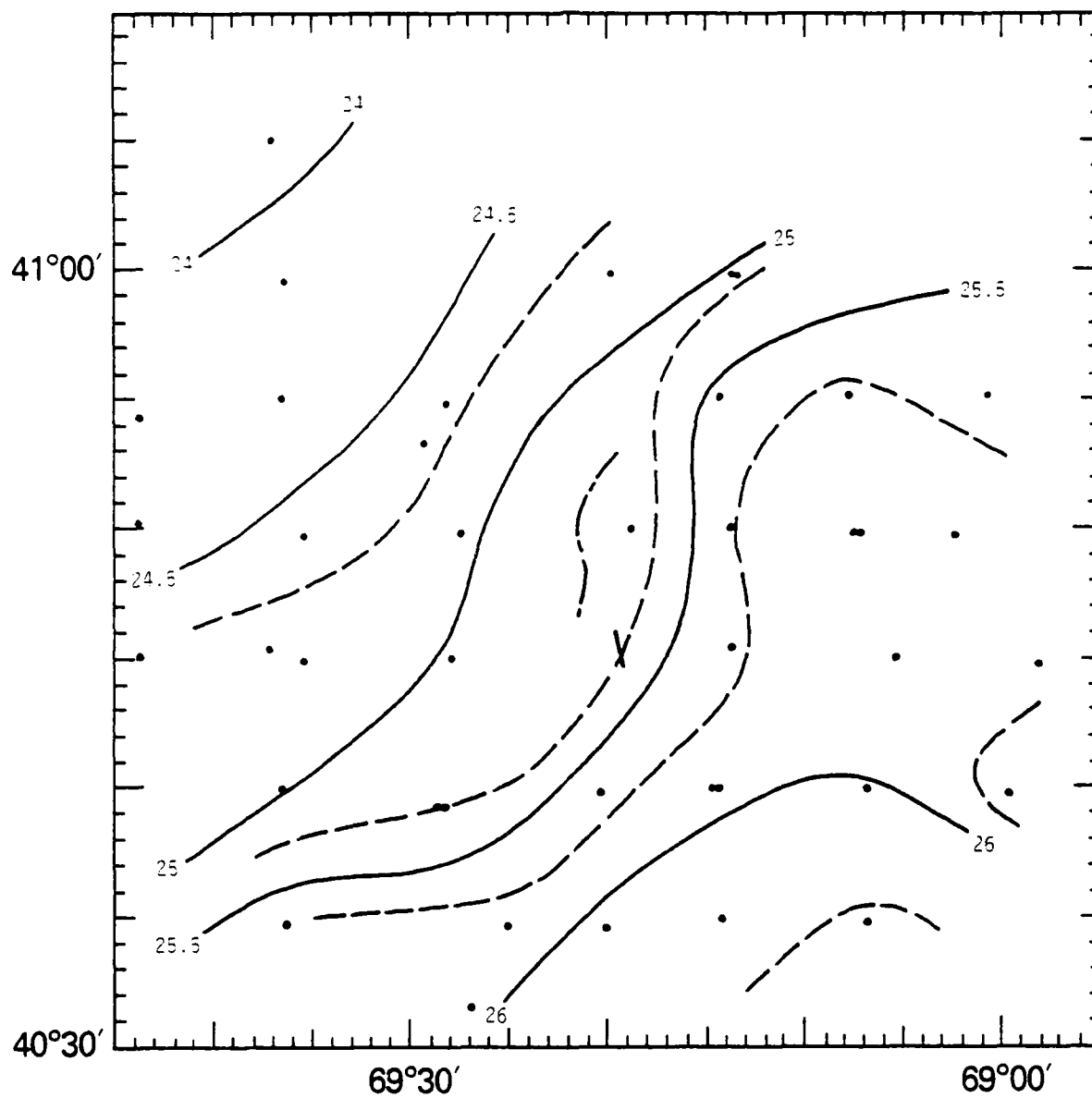


Fig. 5.21. Sigma-T field at bottom.

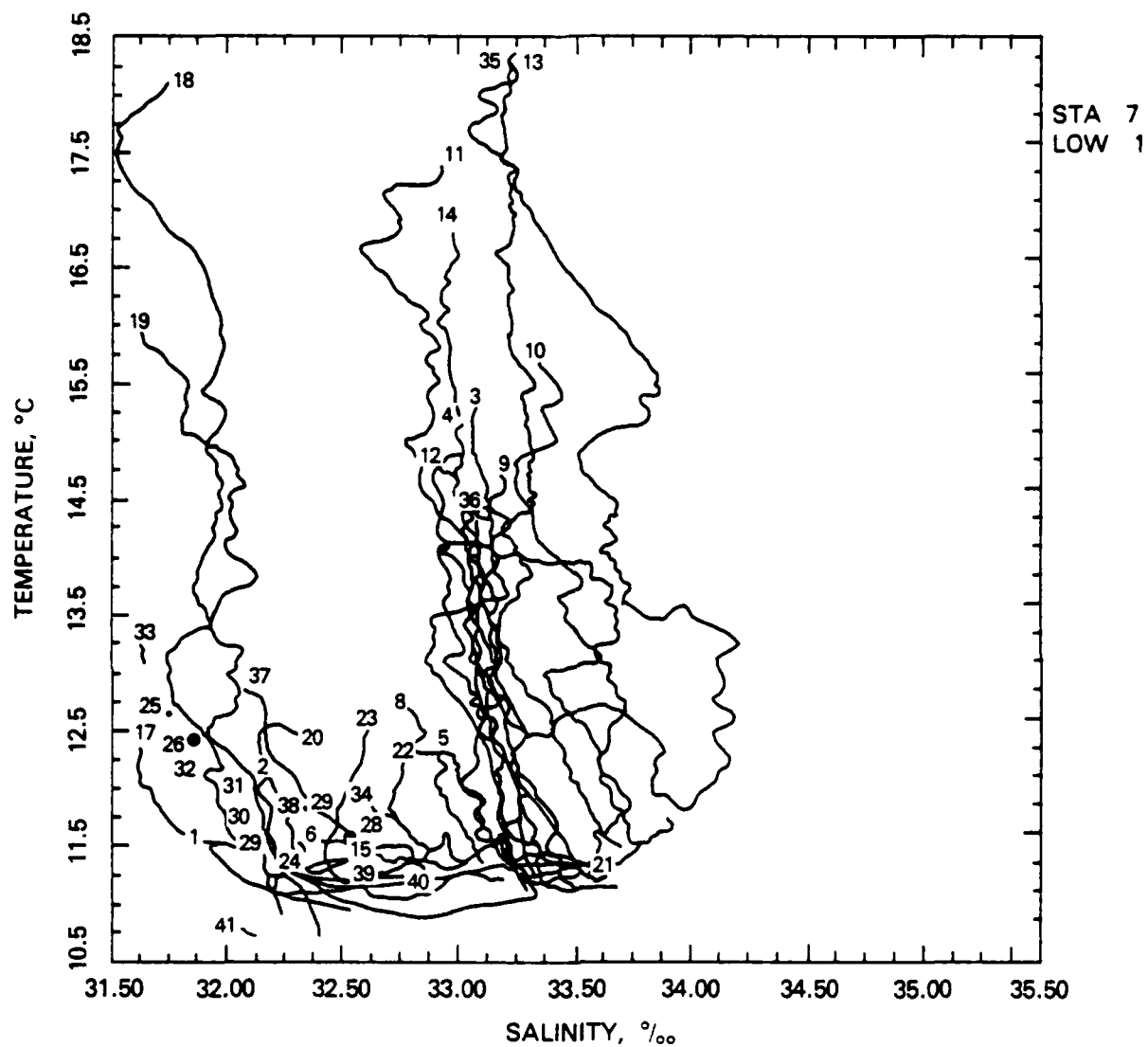


Fig. 5.22 (a) Composite T-S diagram

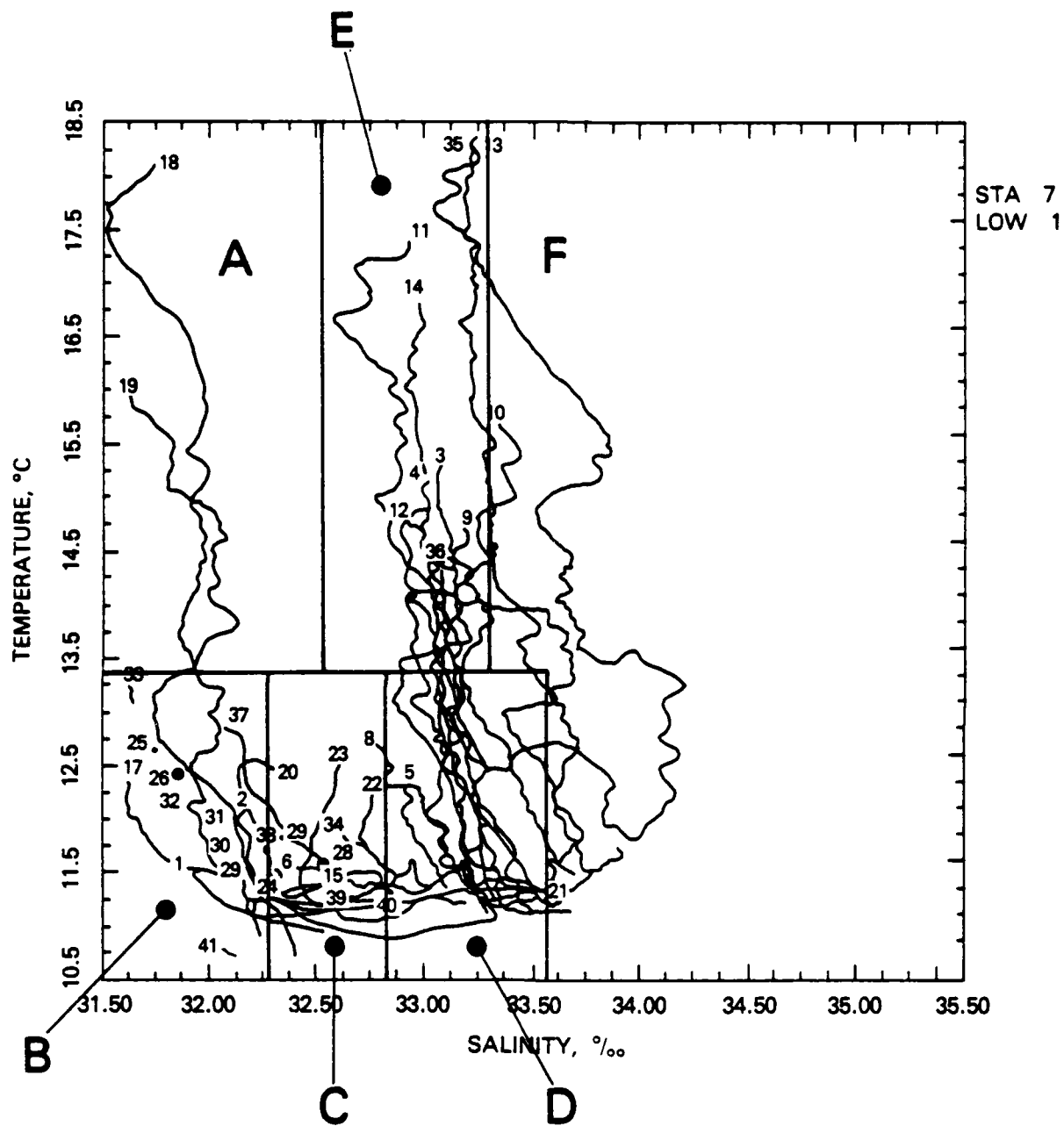


Fig. 5.22 (b) Delineation of 6 water types encountered in the Nantucket Shoals area.

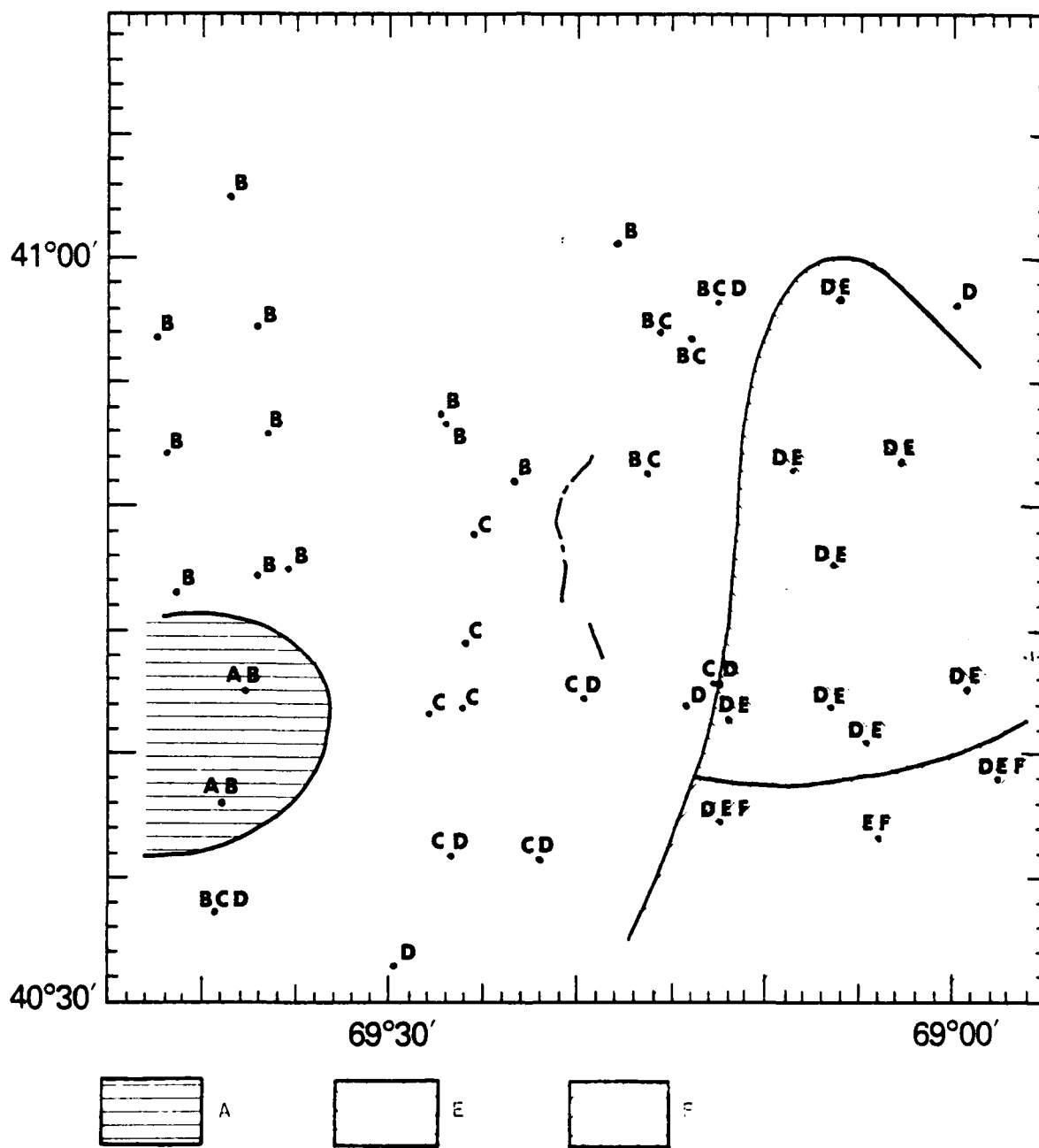


Fig. 5.23. Location of water types in the upper portion of the water column.

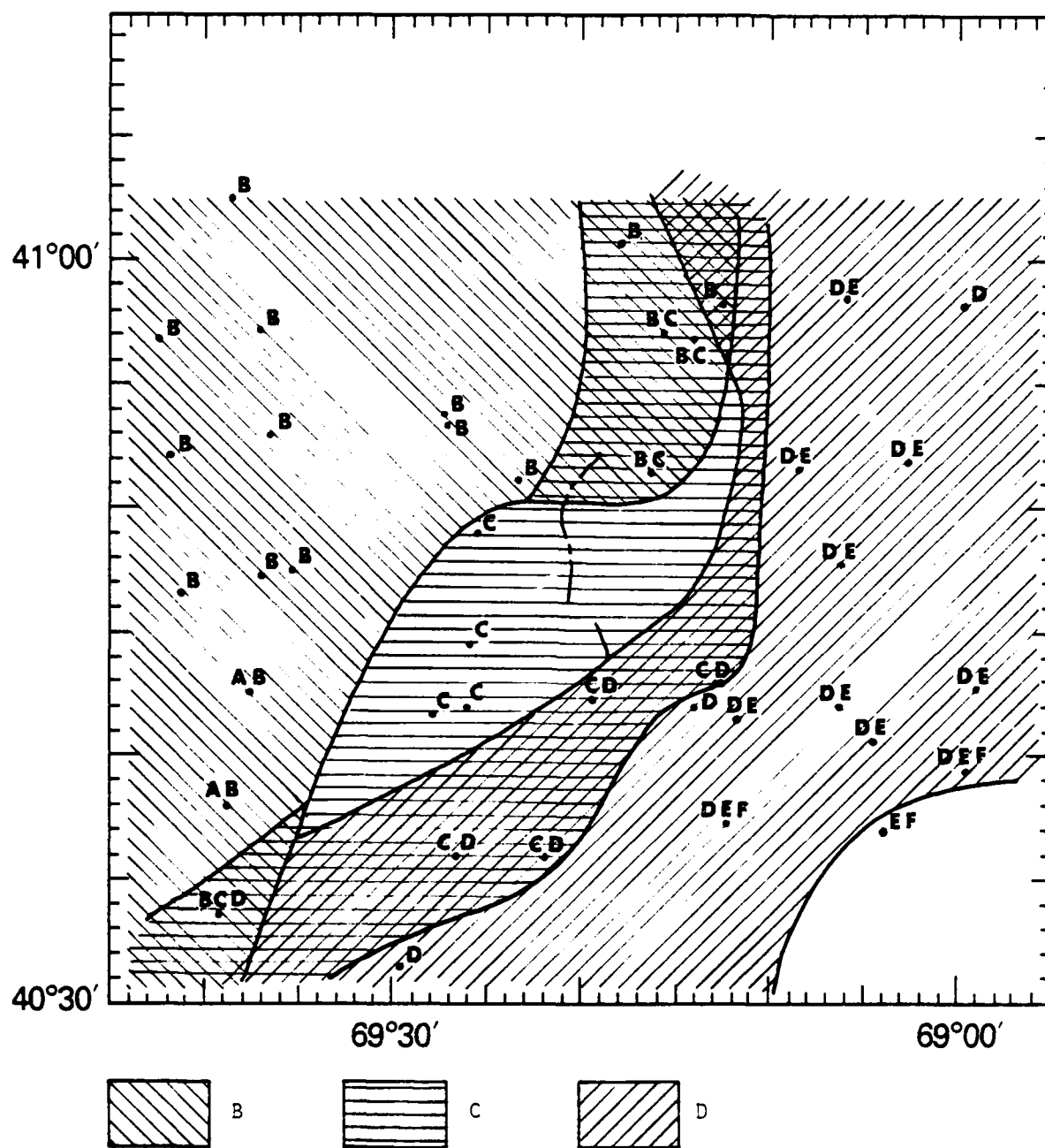


Fig. 5.24. Location of water types in the lower portion of the water column.



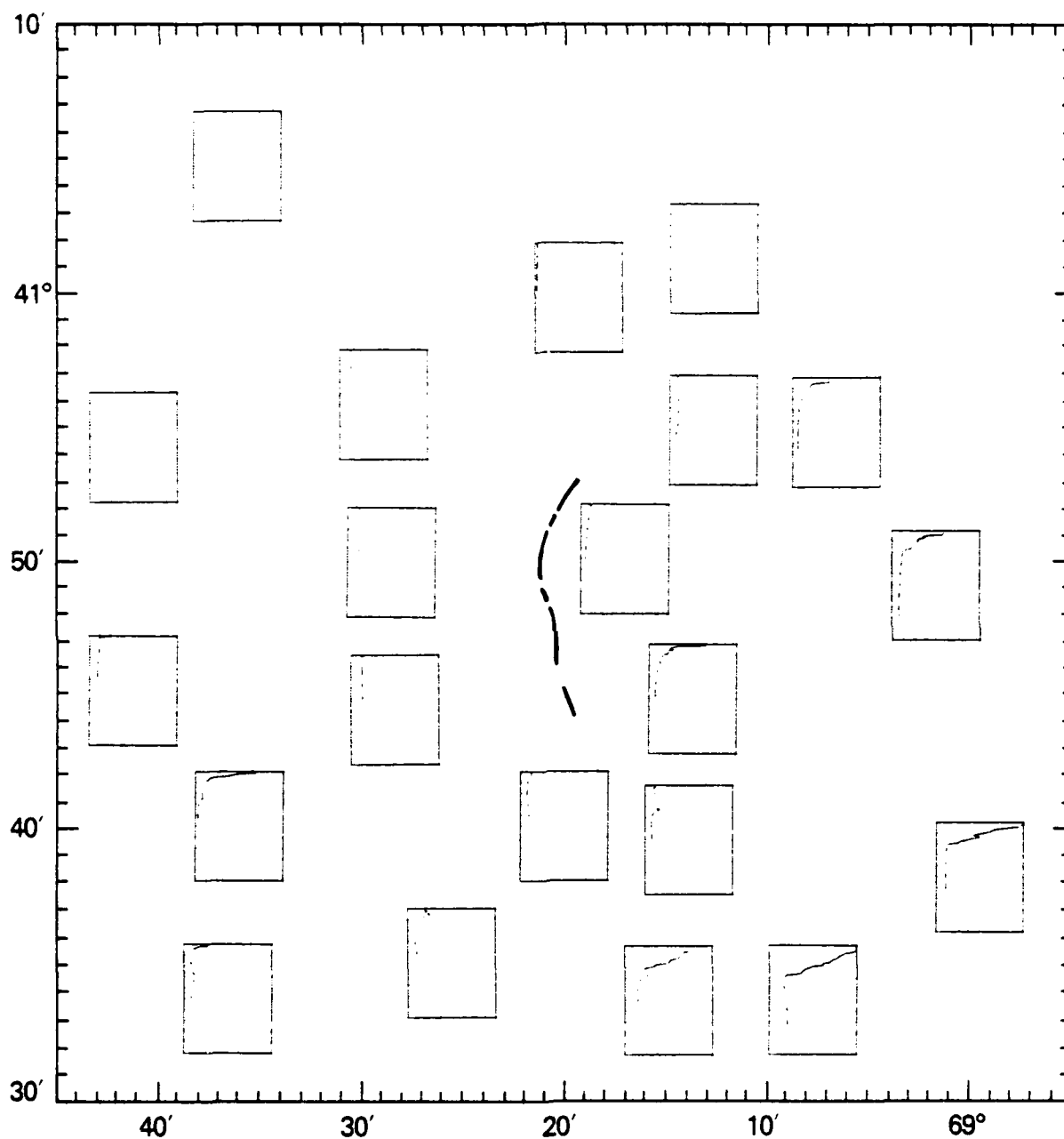


Fig. 5.25. Map of typical temperature profiles.

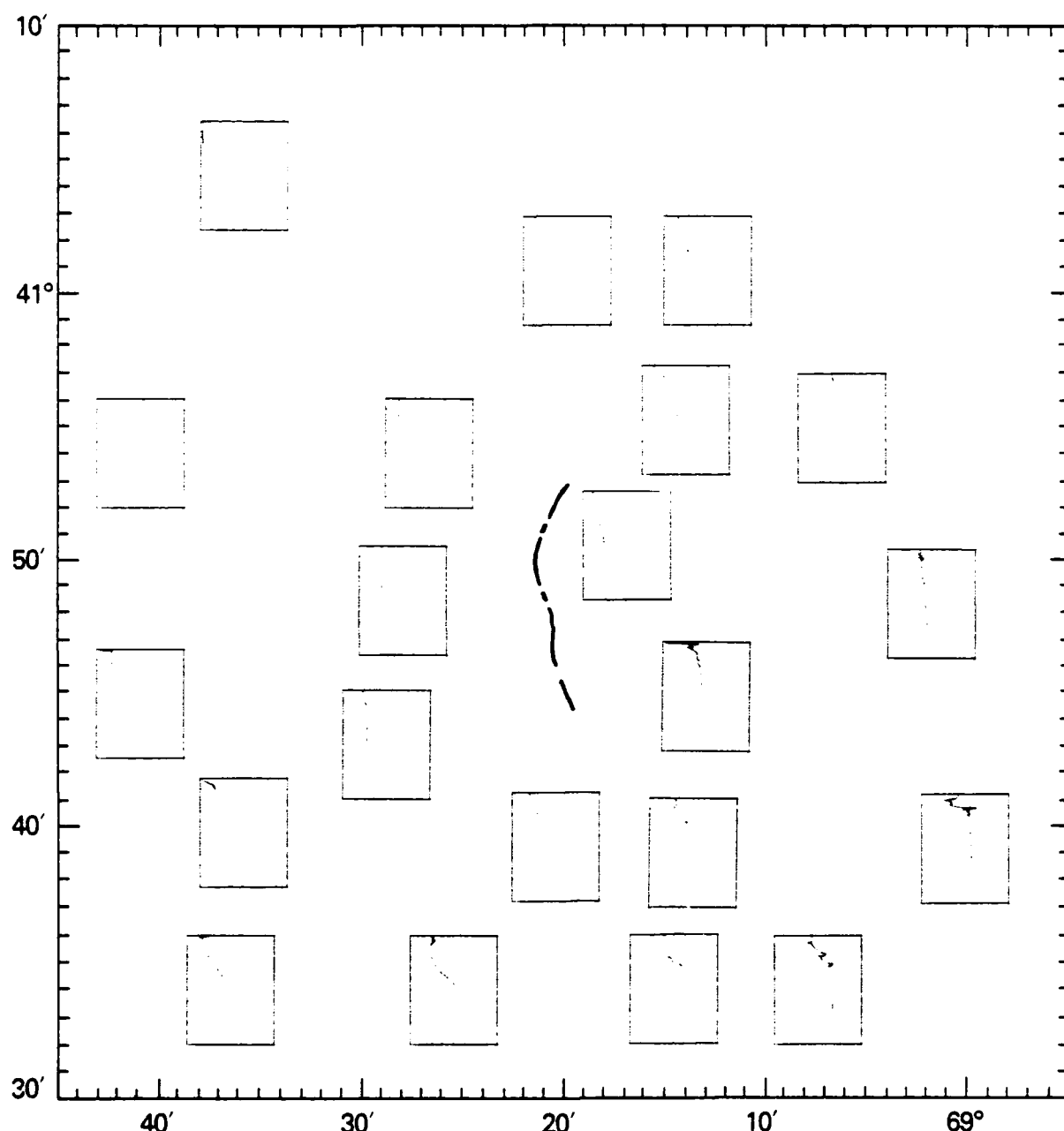


Fig. 5.26. Map of typical salinity profiles.

#### ACKNOWLEDGMENTS

This work was supported by the Naval Research Laboratory core program. Scientific and technical personnel who contributed to this work were W. Garrett, NRL Code 4350, senior scientist; Jack Ostrander, NRL Code 5004, navigator; Lee Houston, Ralph Gallatin and William Robey, NRL Code 5004, technicians; and especially CAPT John W. Areus and the crew of the USNS HAYES who operated in extremely difficult conditions.

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## APPENDIX A. PLOTS OF CTD CASTS

Lowerings 1 to 41 are plotted sequentially in Figs. A.1 to A.41. The left-hand plate contains profiles of temperature (solid line), salinity (long dashed line) and sigma-T (short dashed line). The right-hand plate is the T-S diagram for the lowering. All casts are plotted on uniform size blocks with uniform axes. These data have been processed in accordance with IV-A.

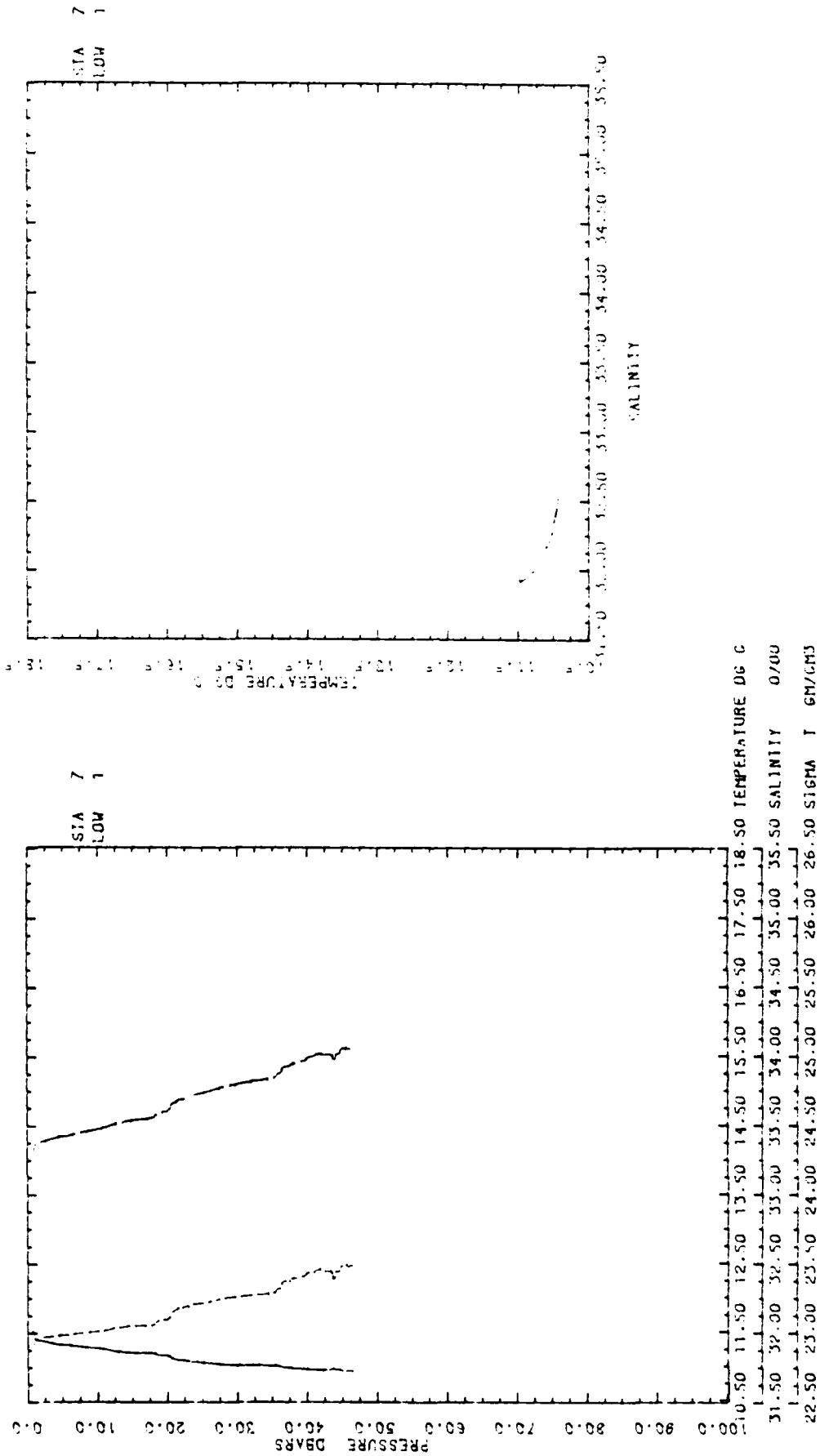


Figure A.1

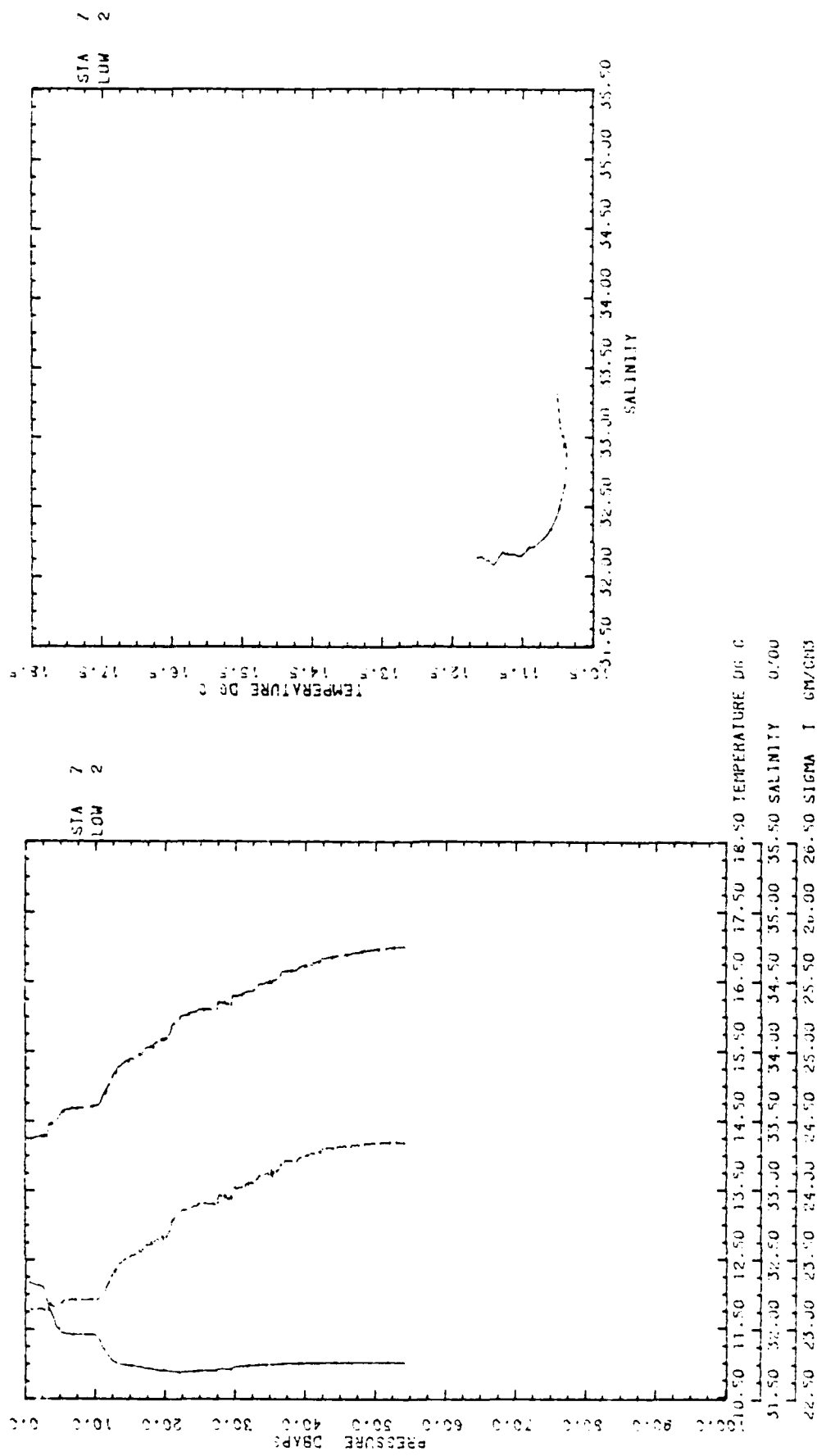


Figure A.2

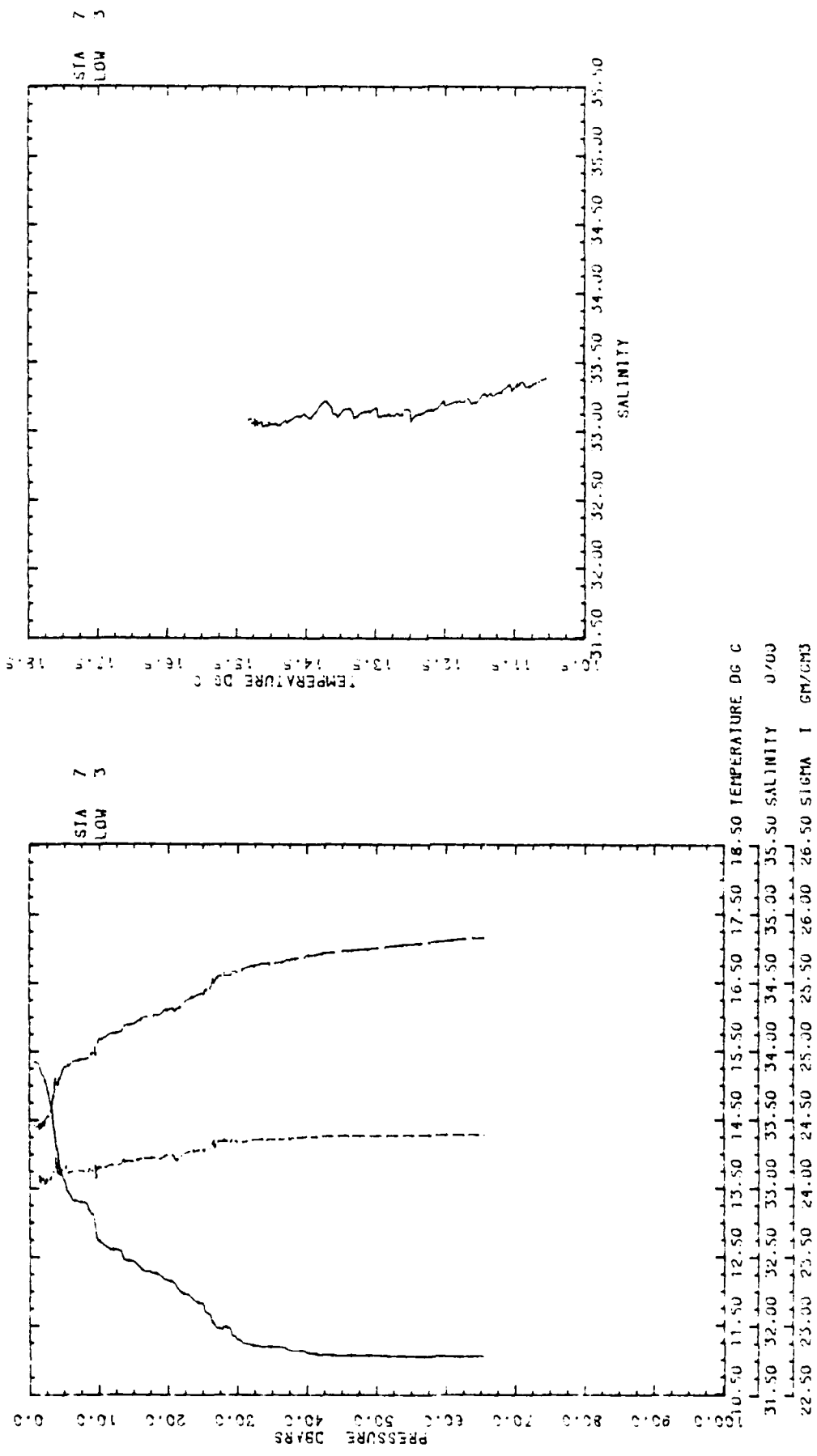


Figure A.3



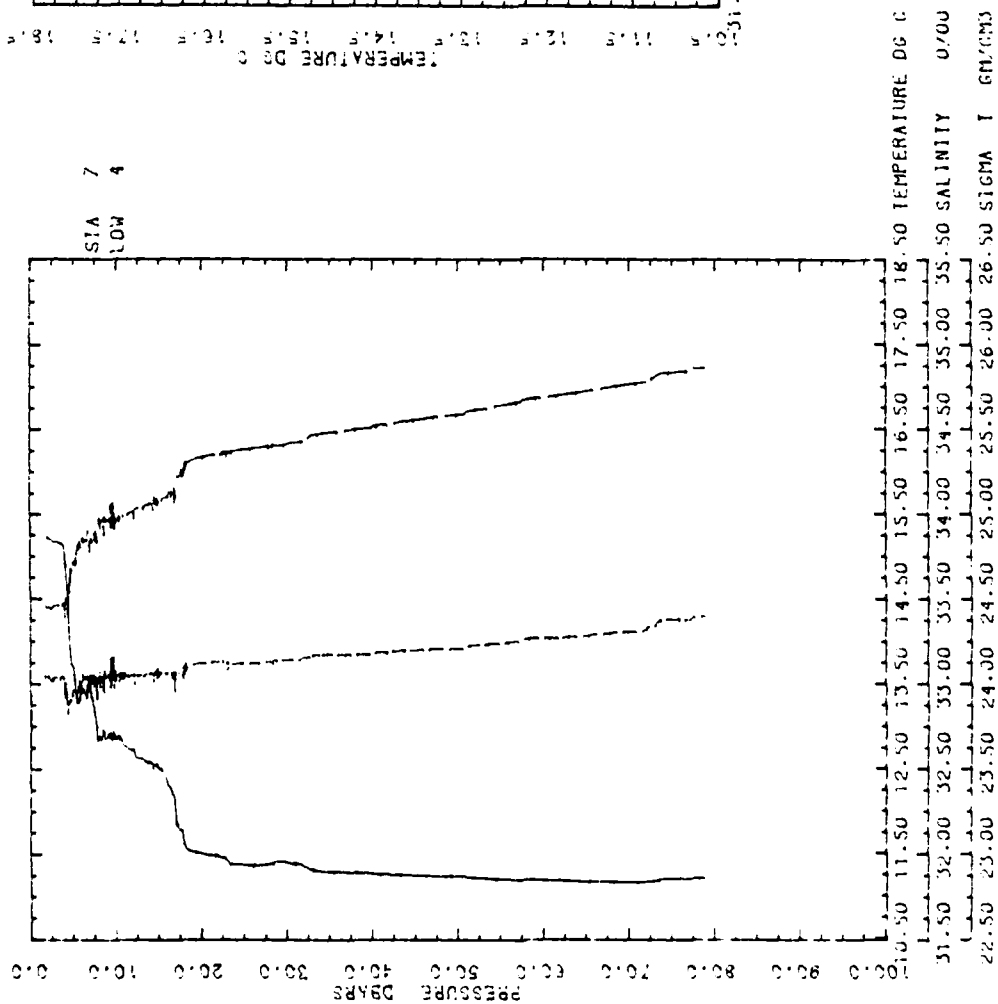
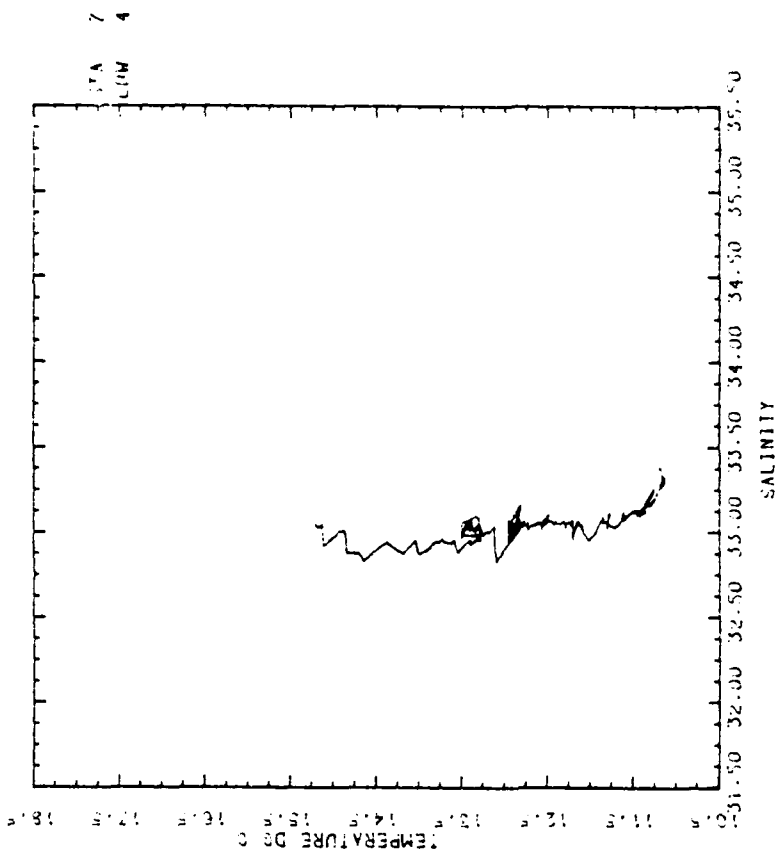


Figure A.4



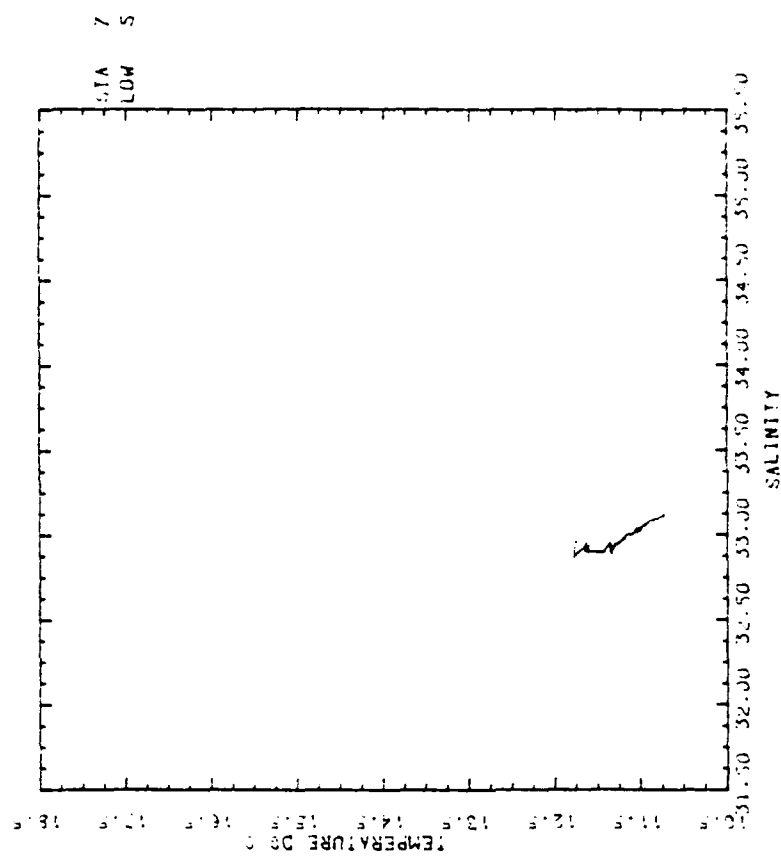
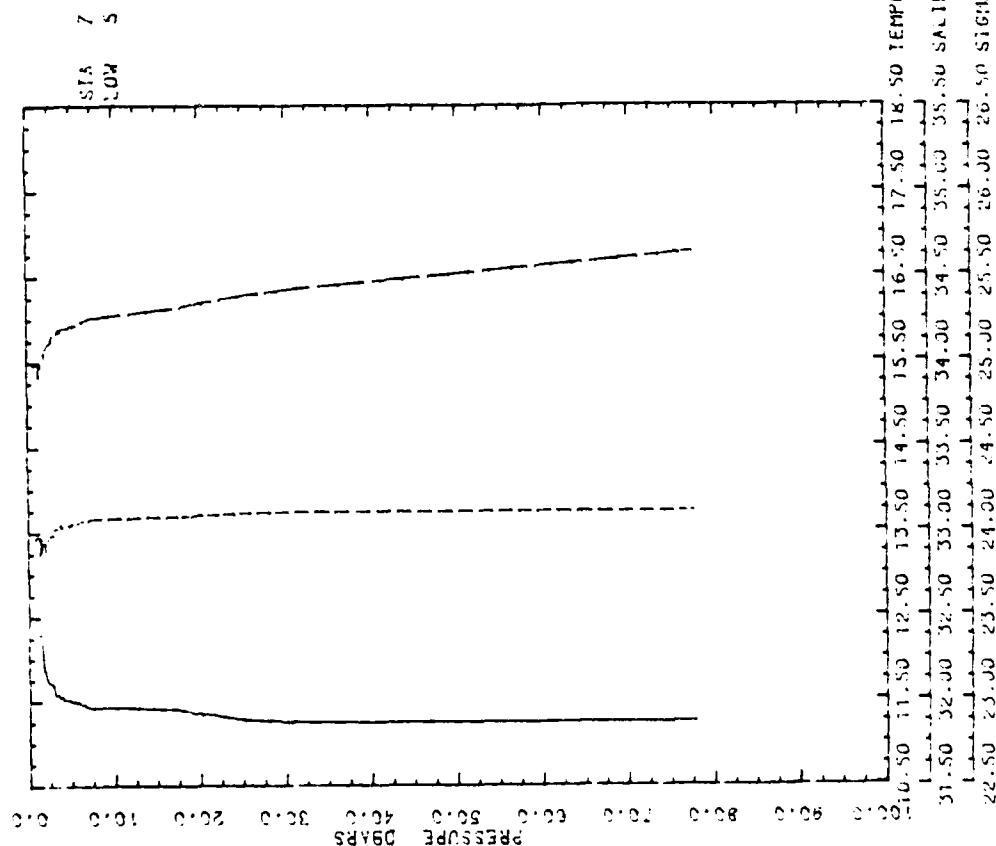


Figure A.5

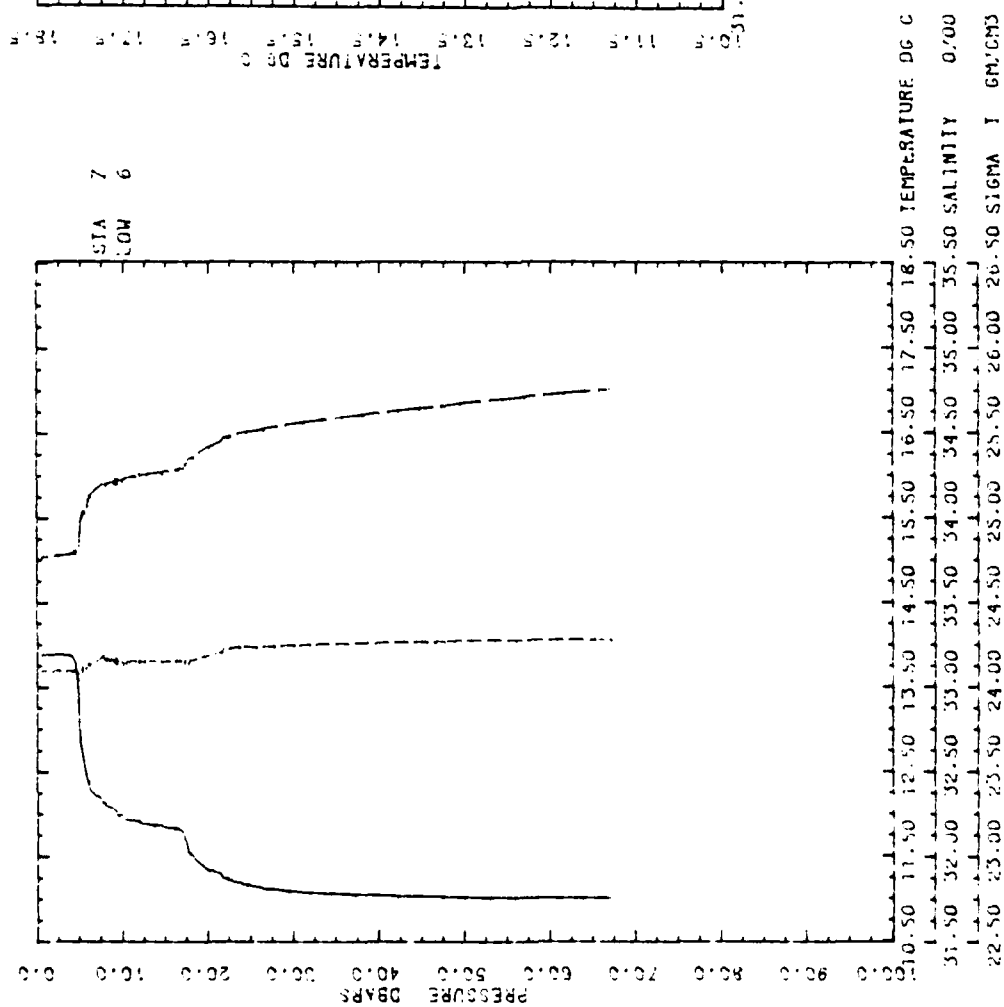


Figure A.6

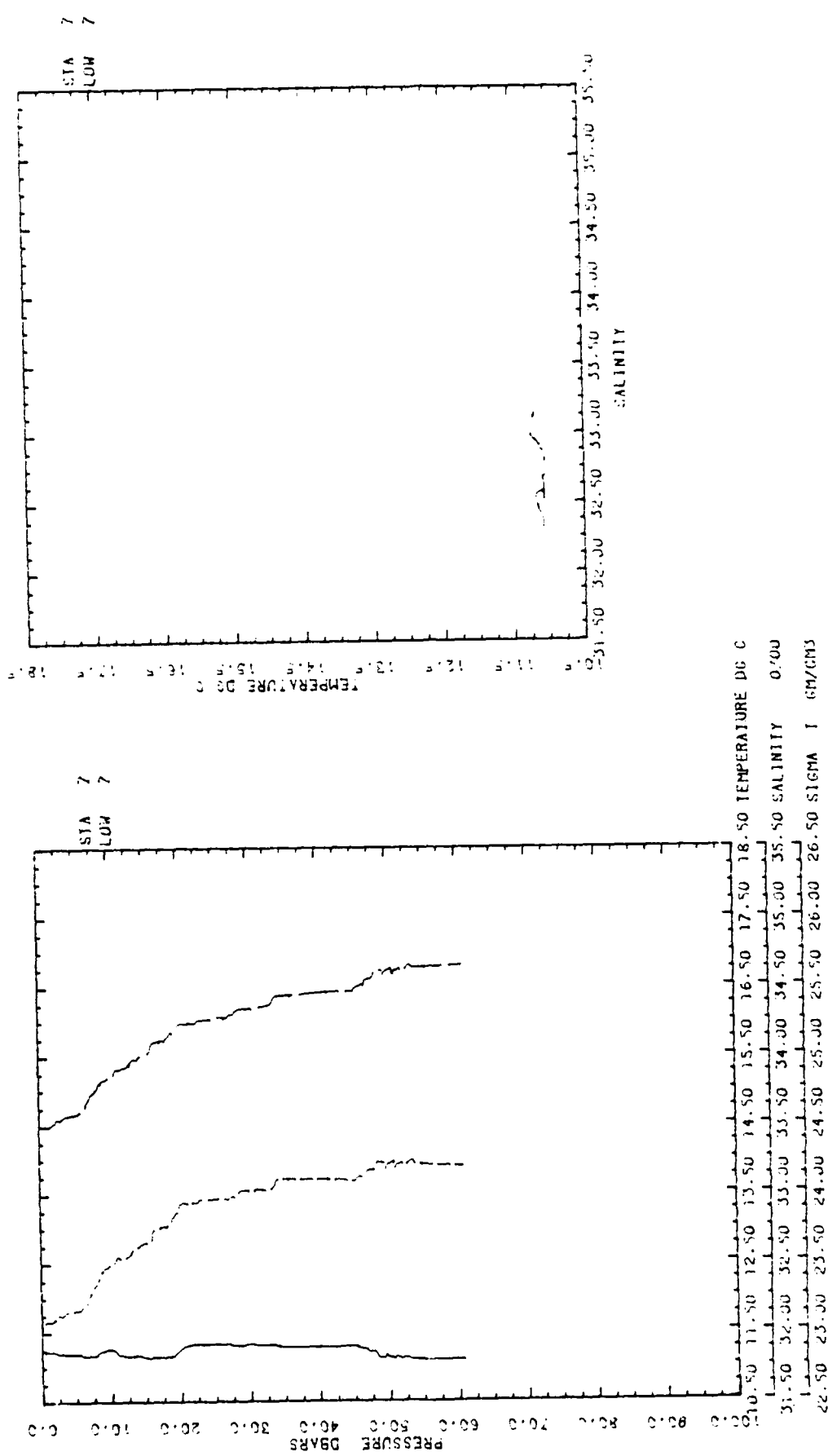


Figure A.7

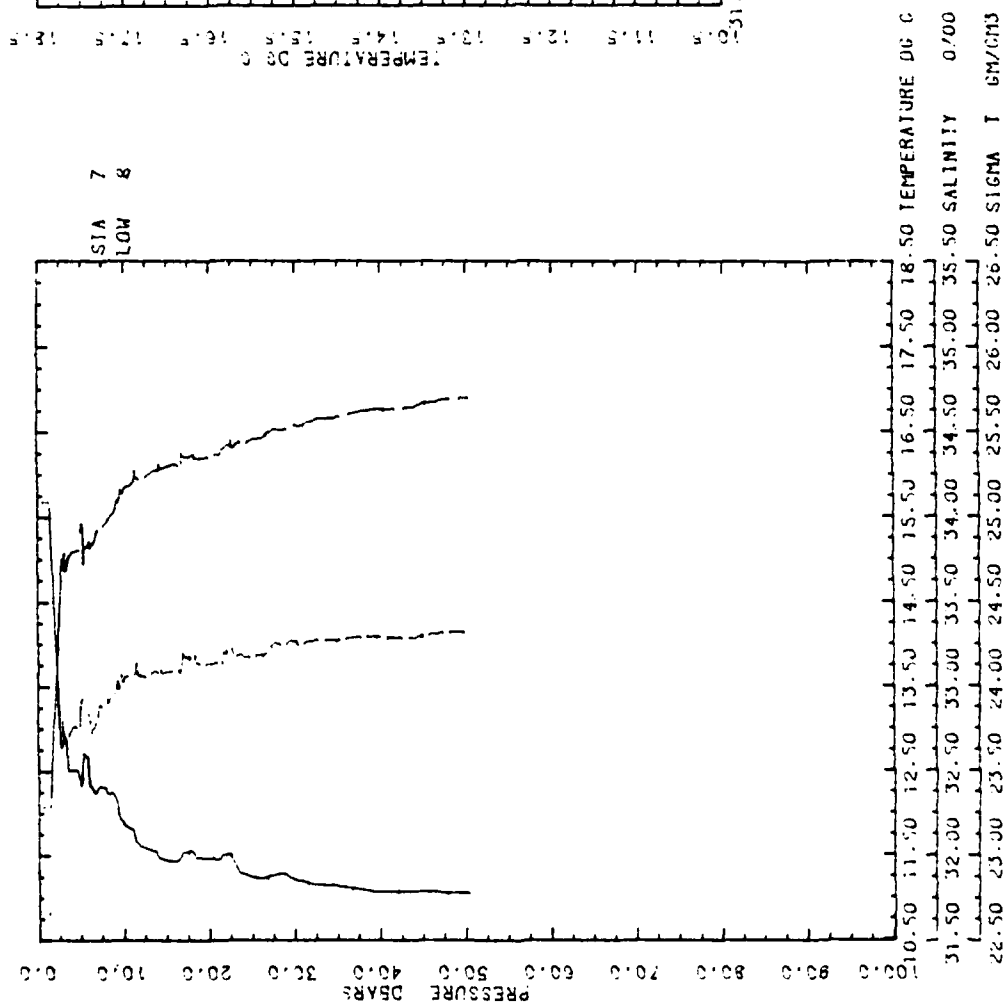


Figure A.8



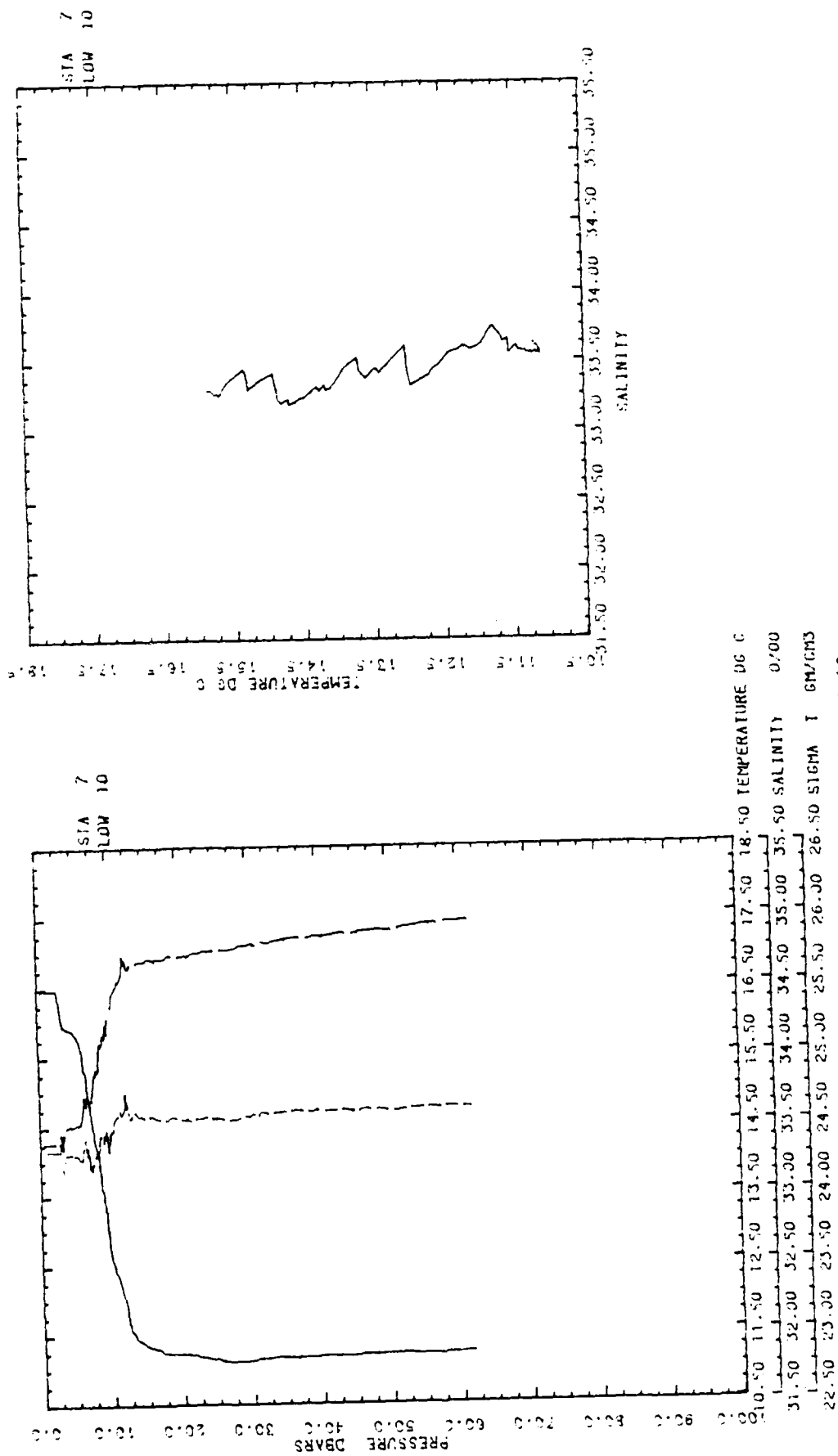


Figure A.10

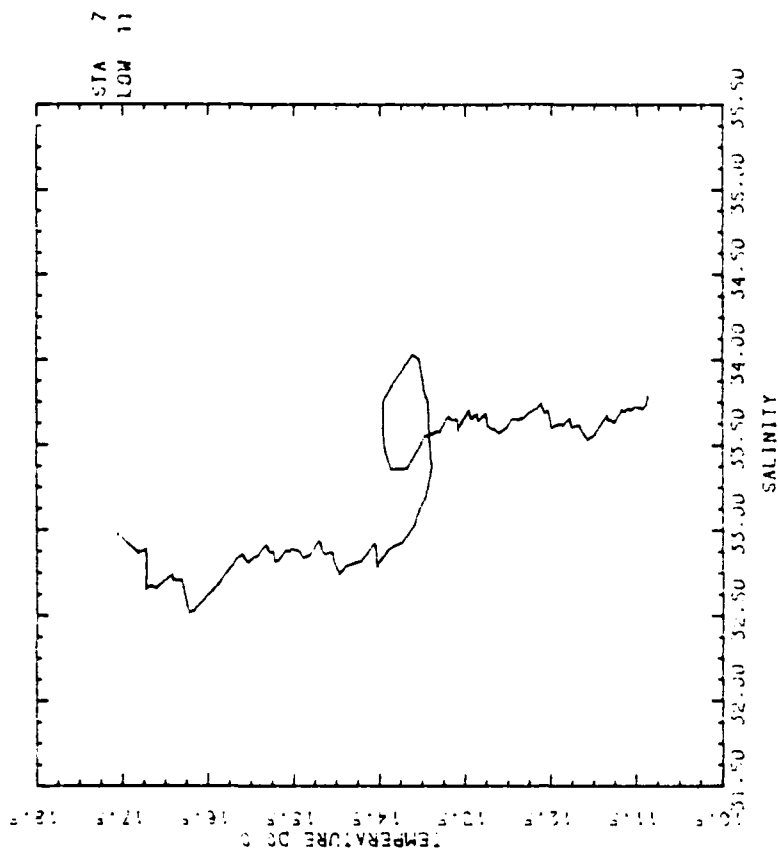
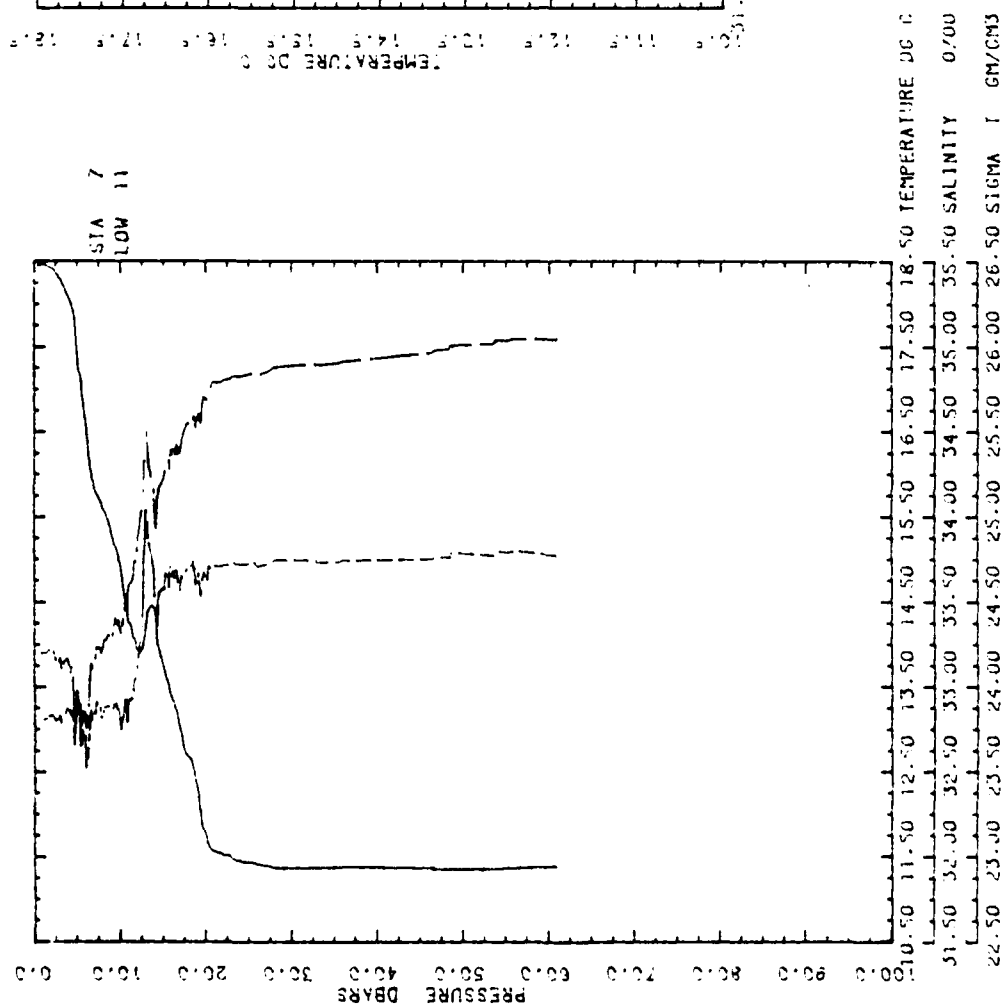


Figure A.11



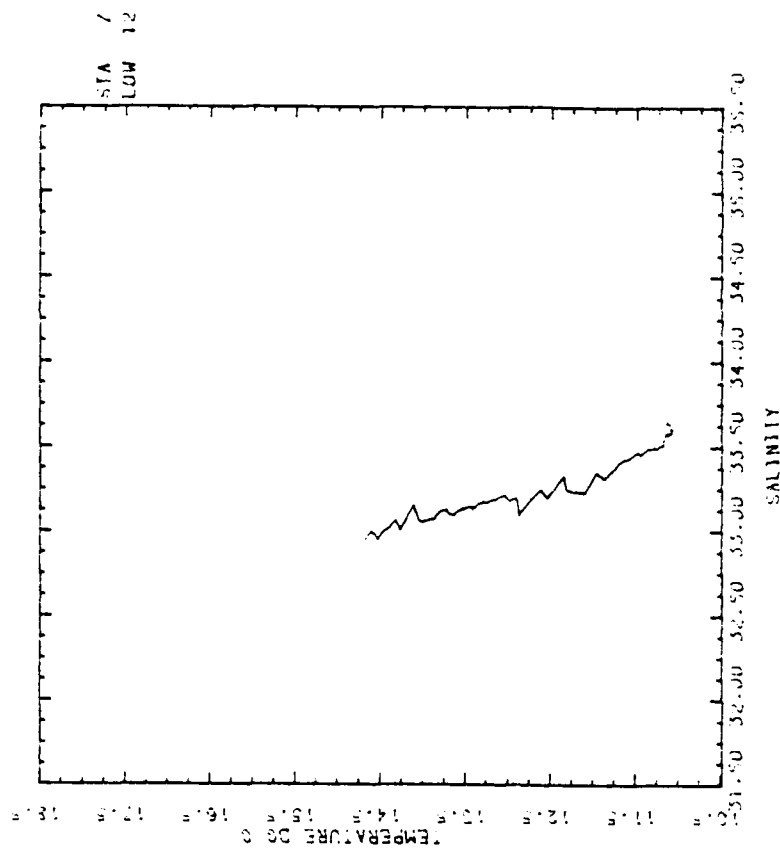
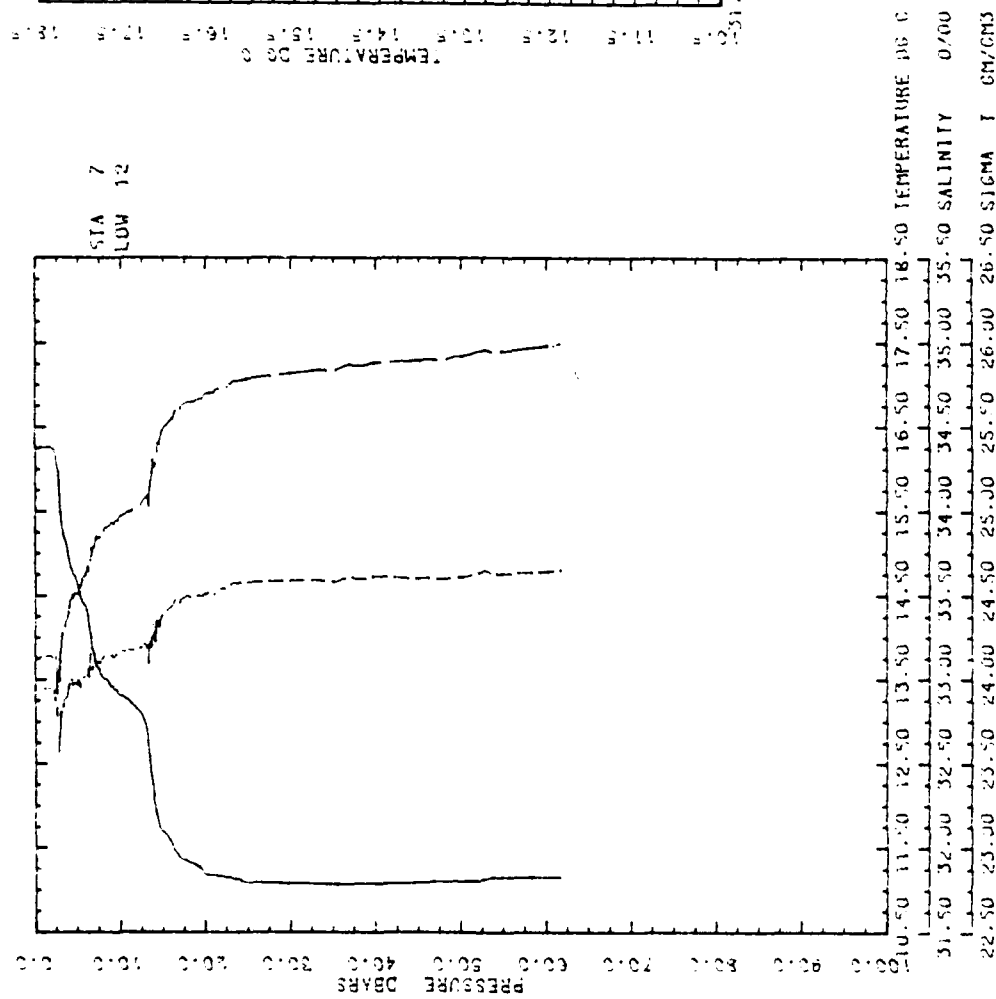


Figure A.12

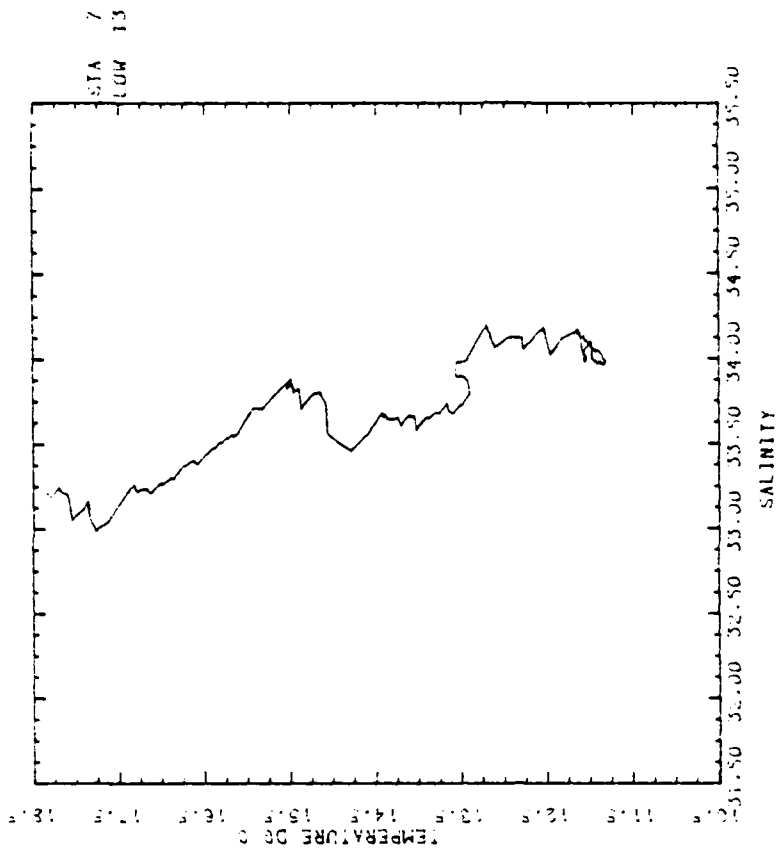
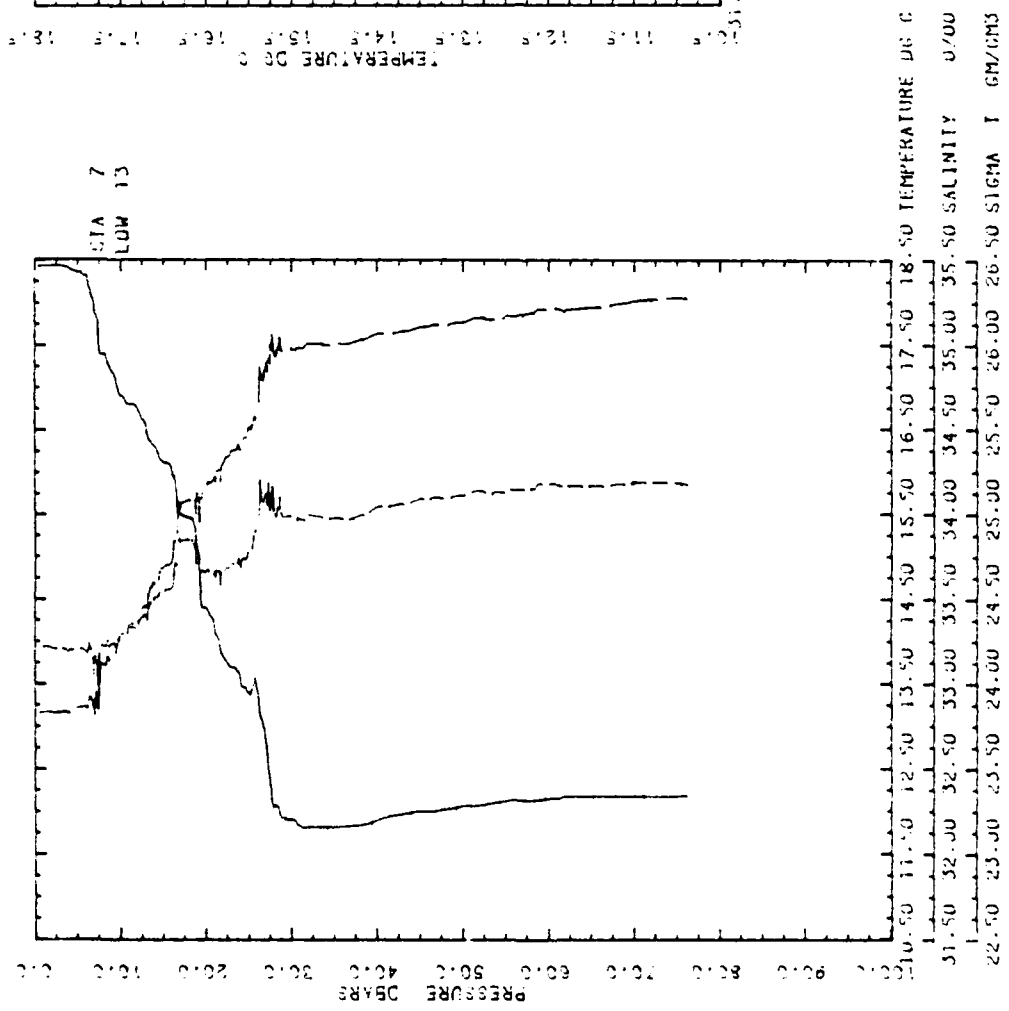


Figure A.13

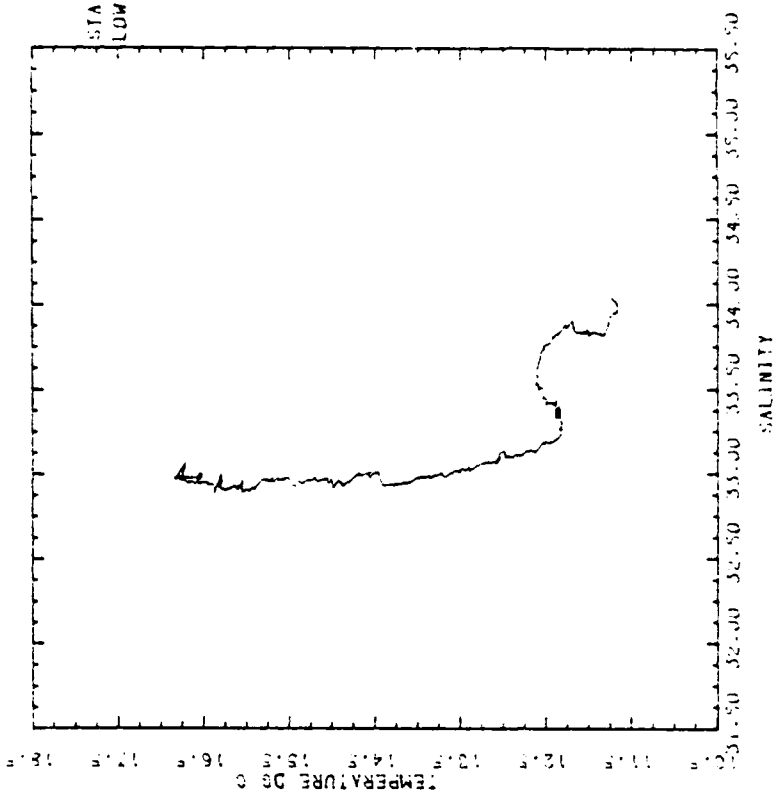
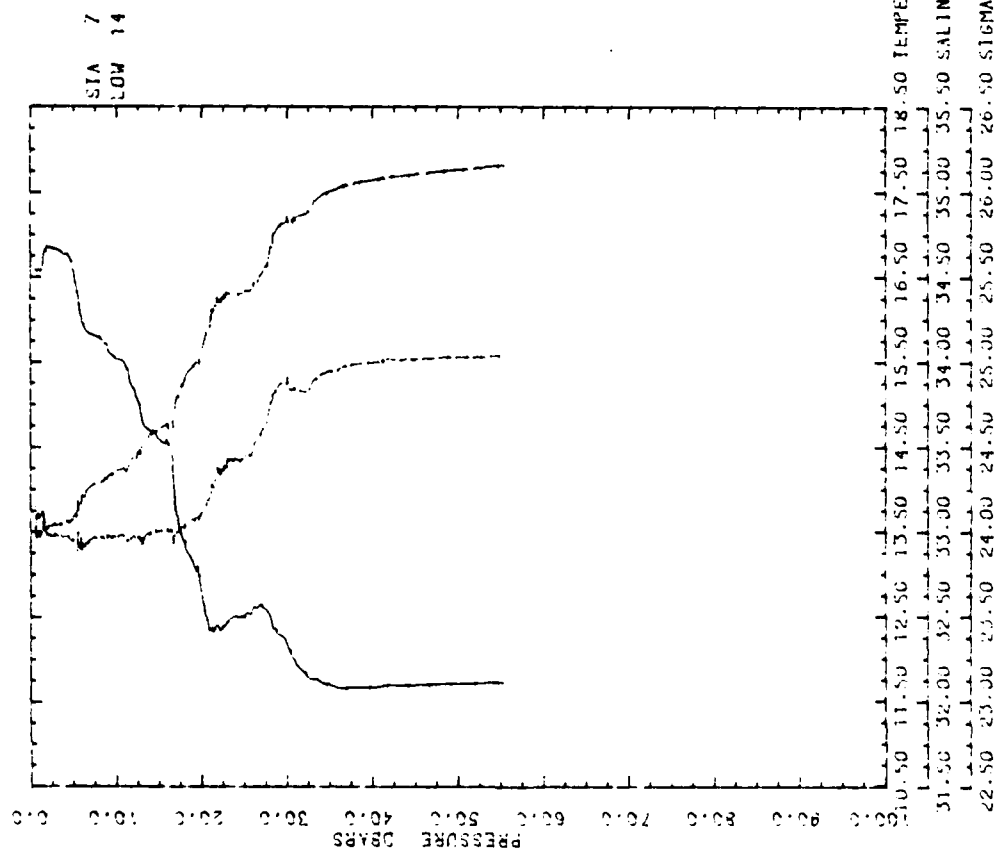


Figure A.14

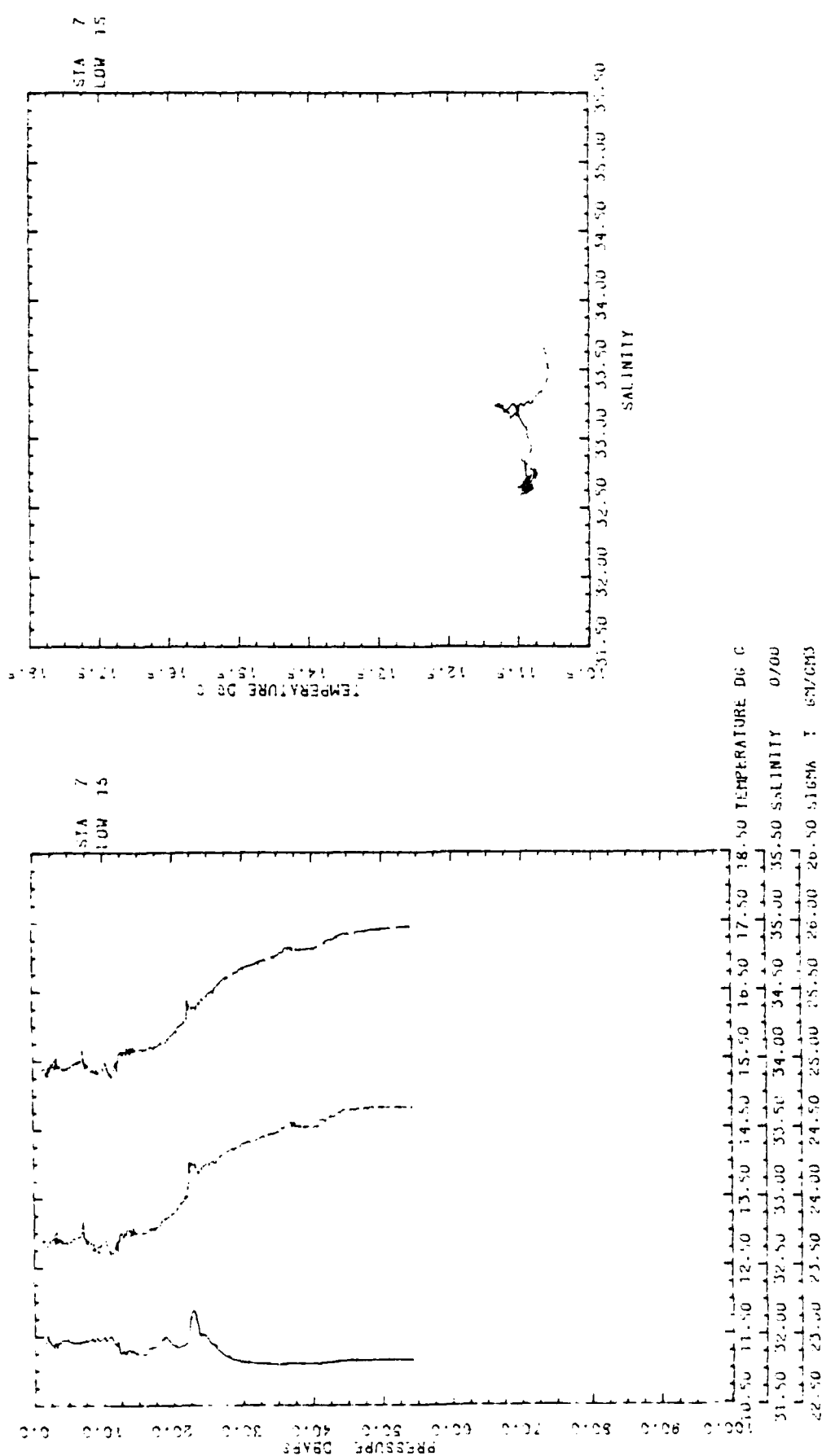


Figure A.15

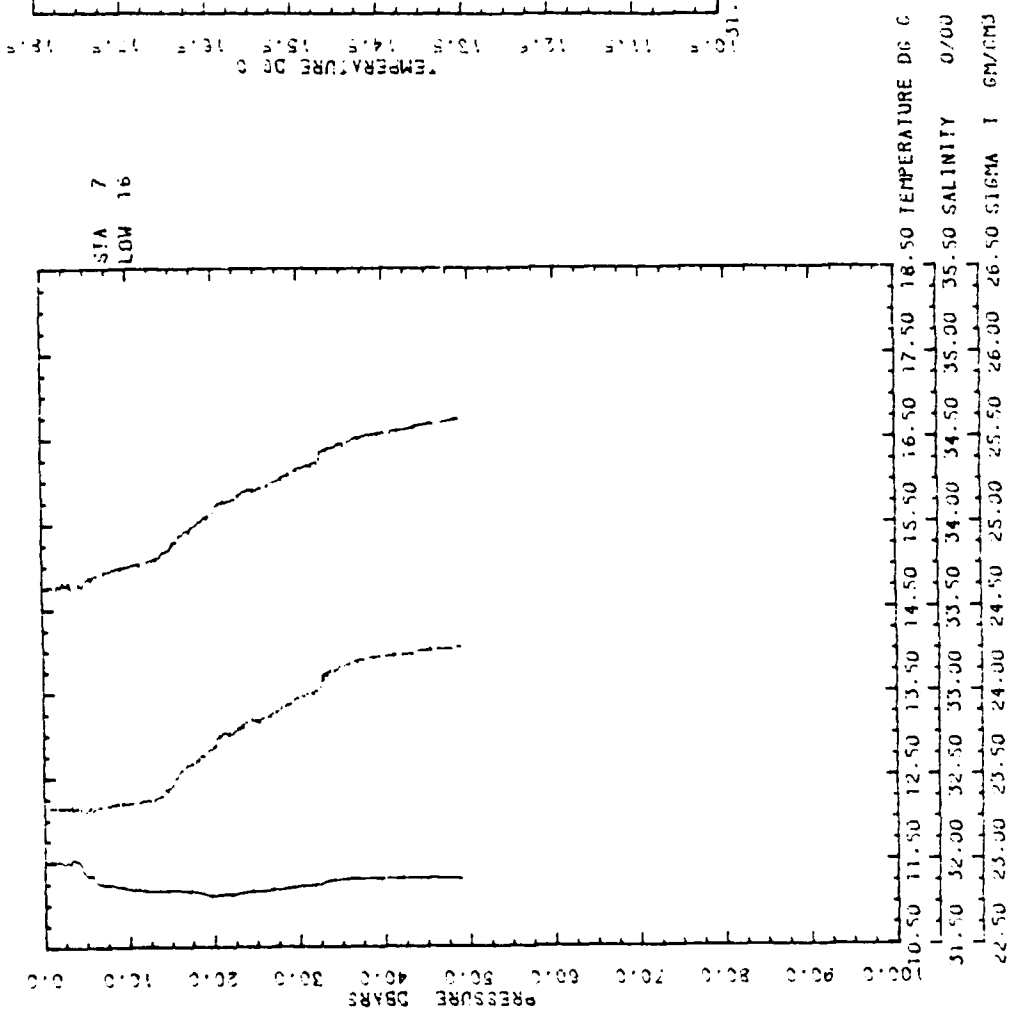
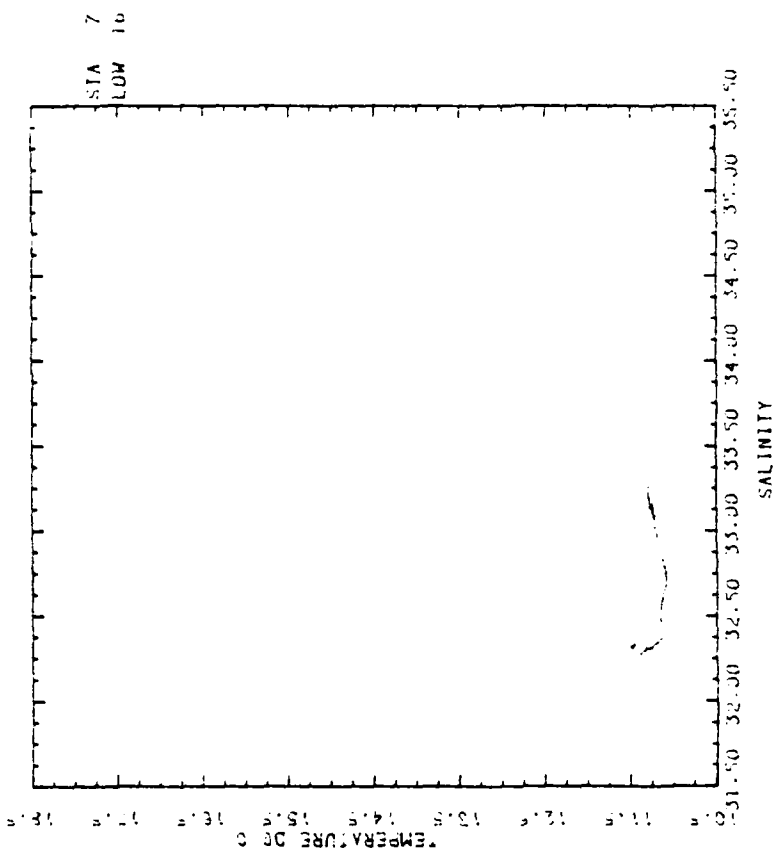


Figure A.16



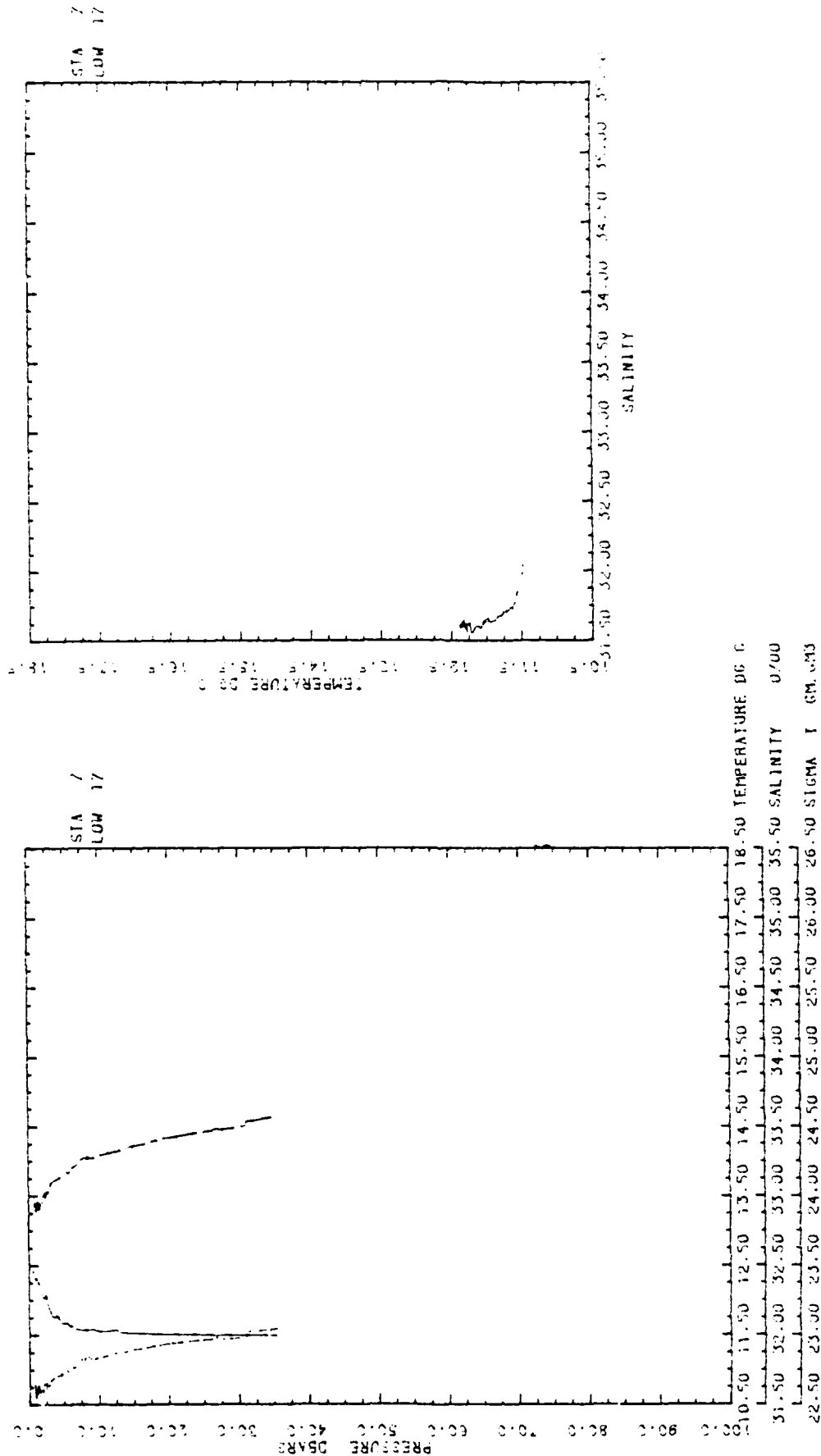


Figure A.17

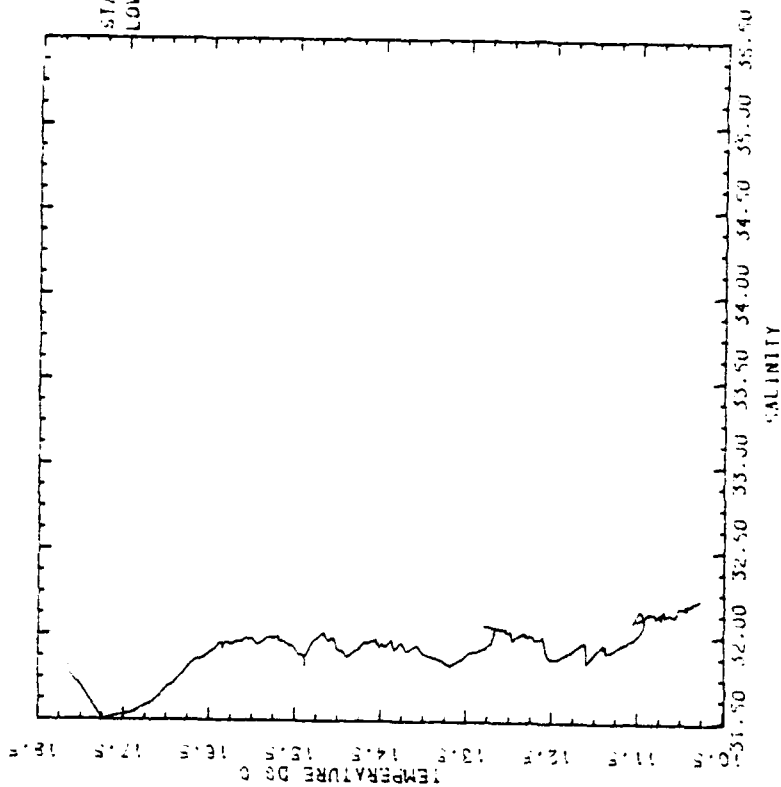
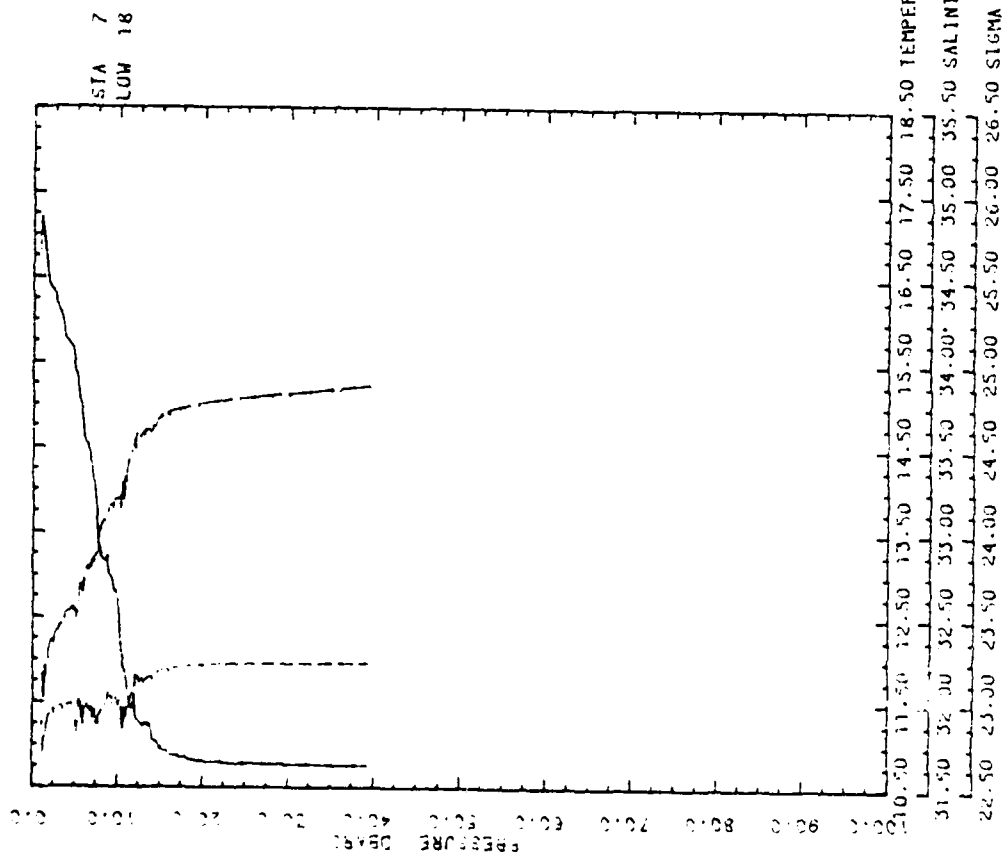


Figure A.18

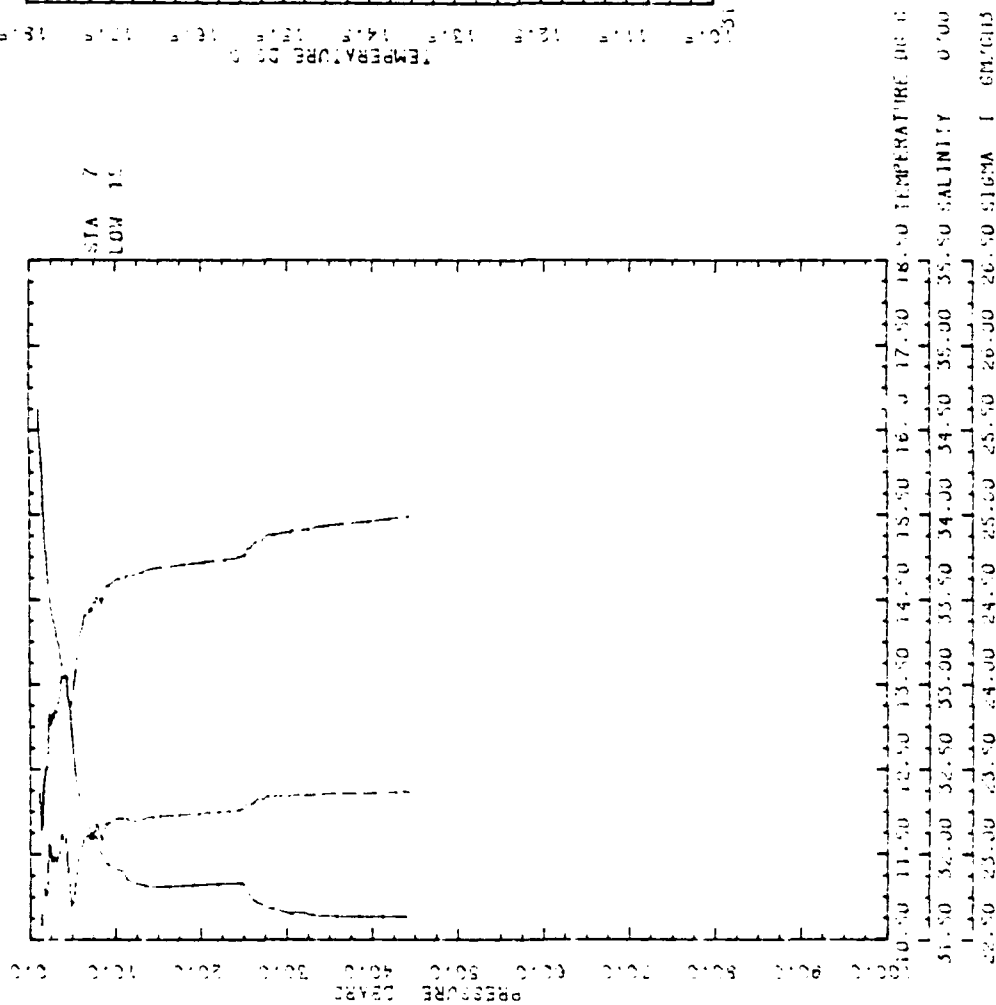
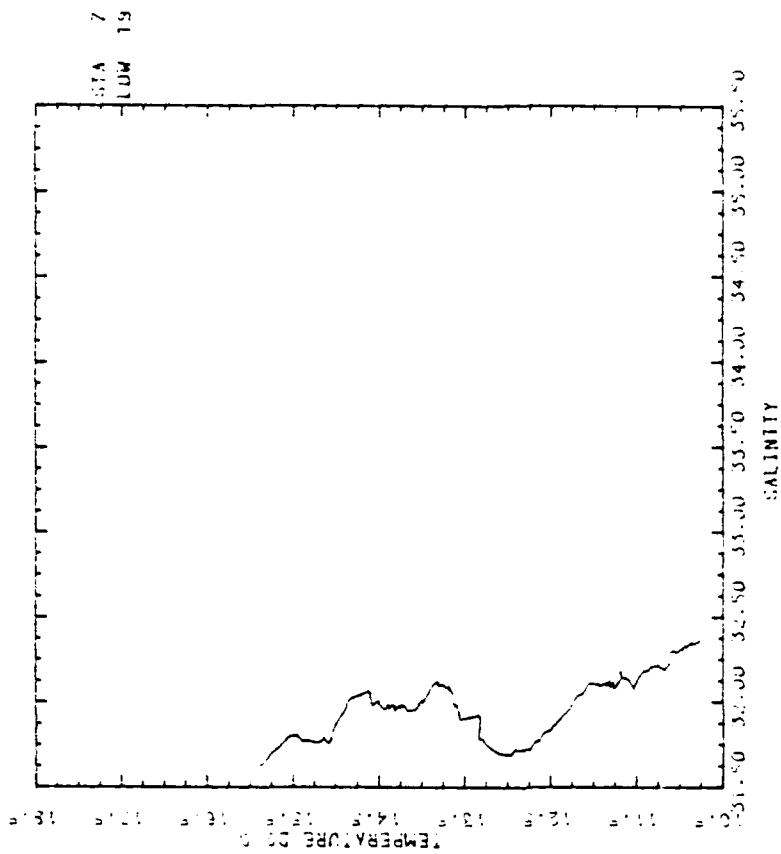


Figure A.19



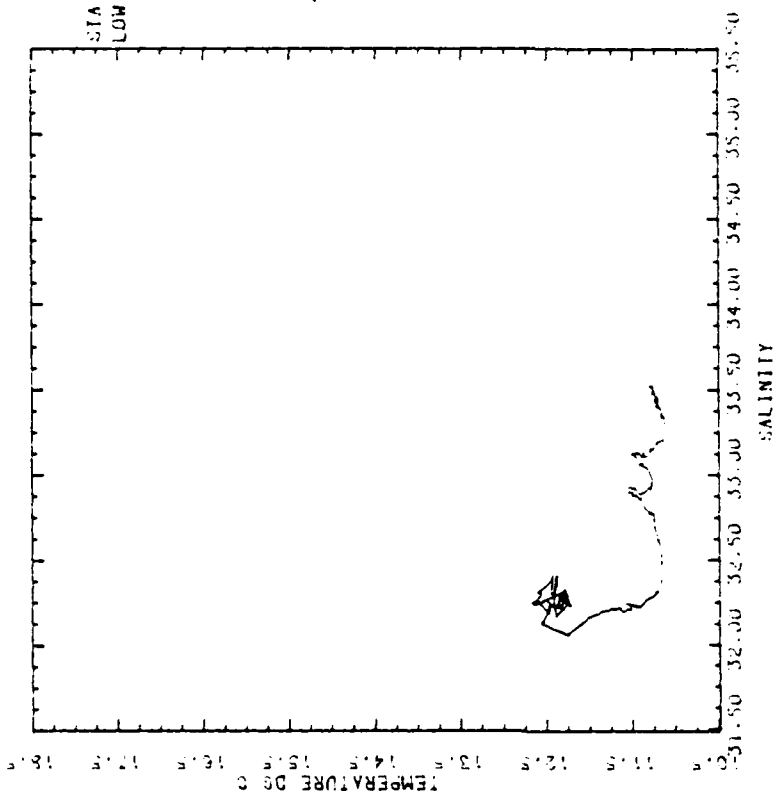
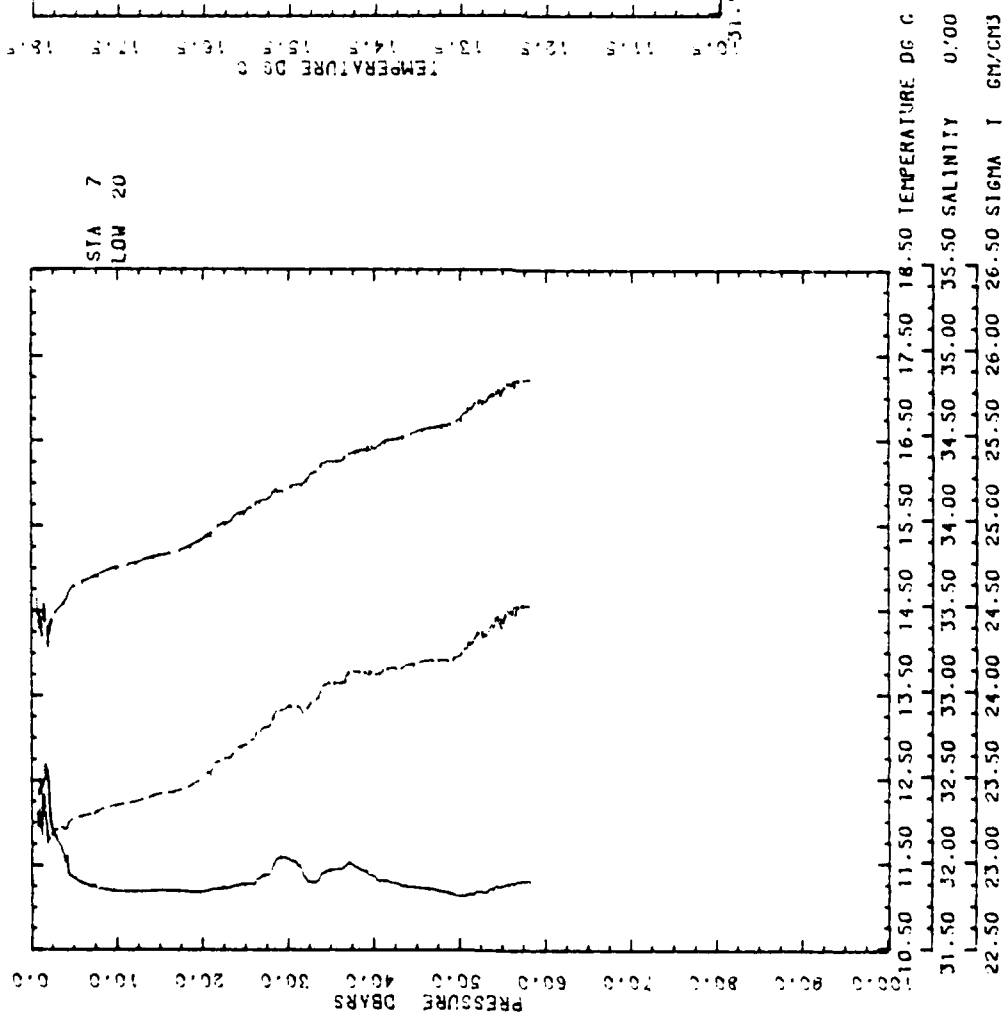


Figure A.20

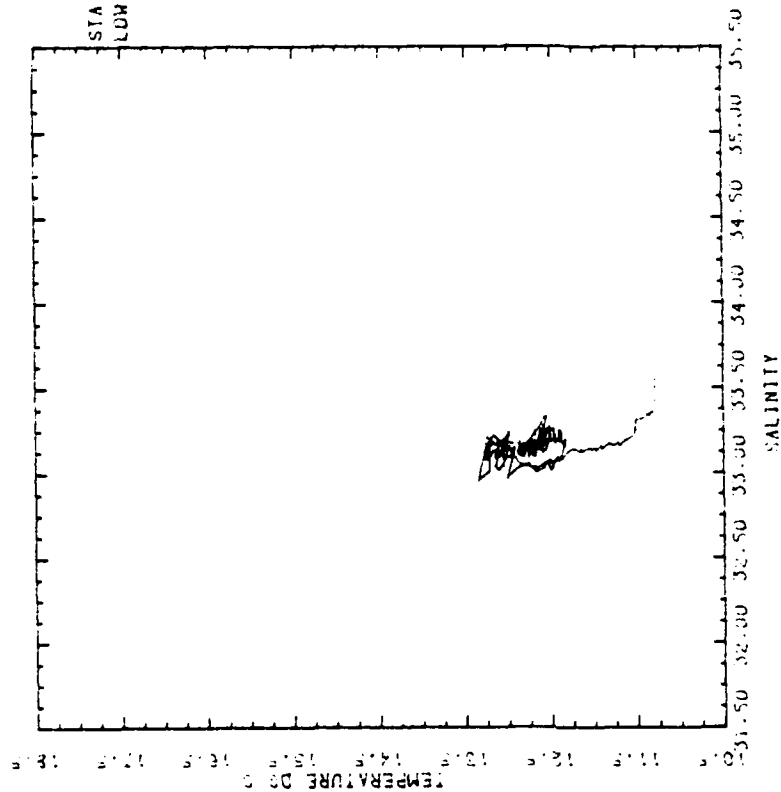
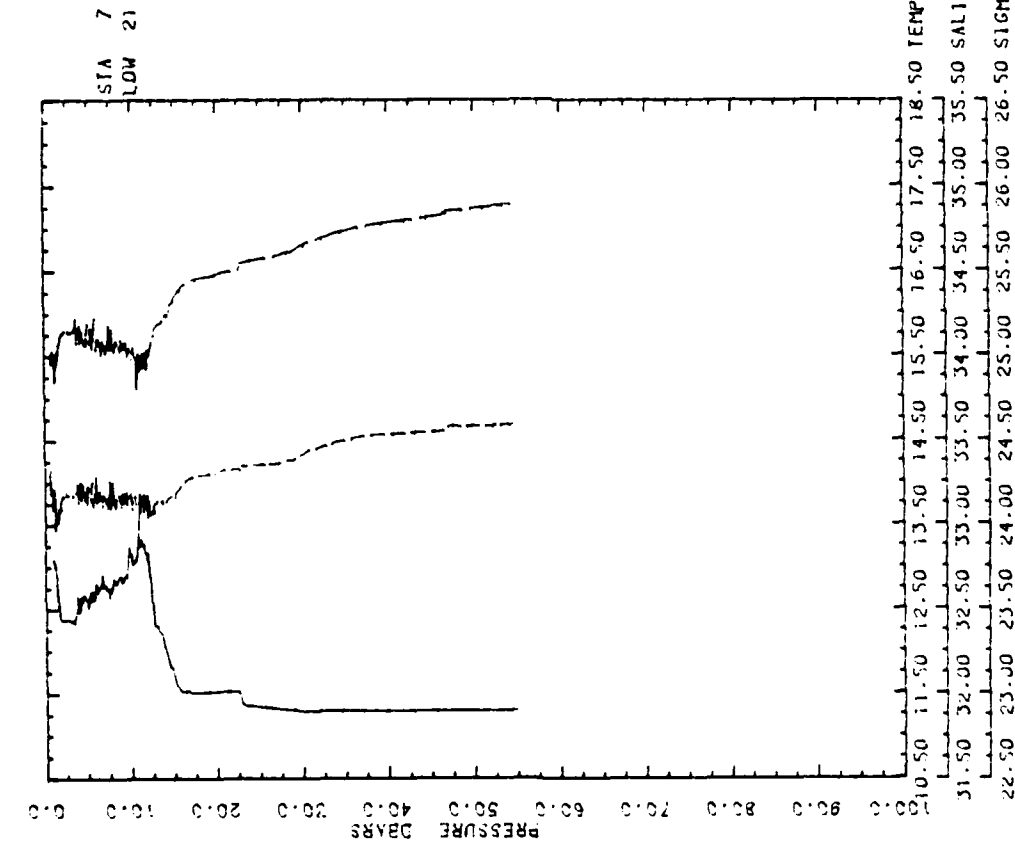


Figure A.21

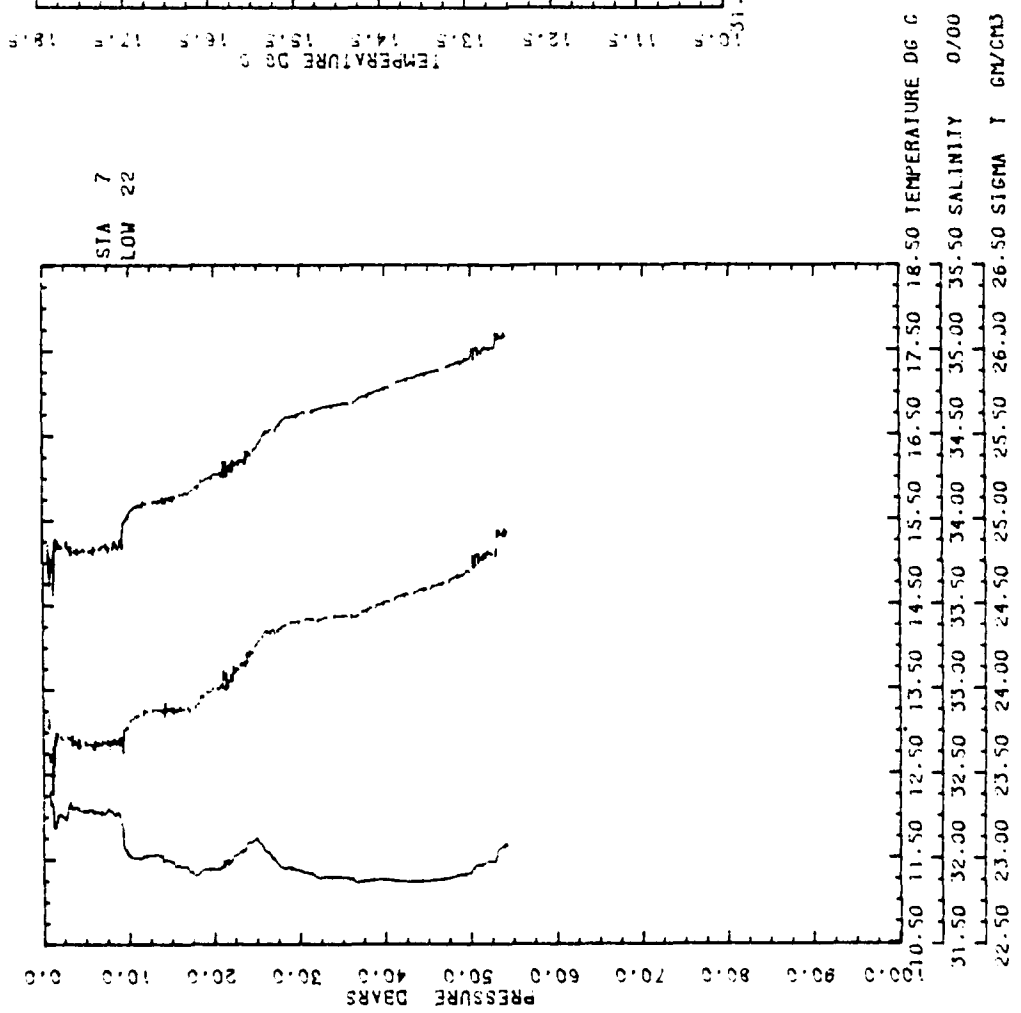
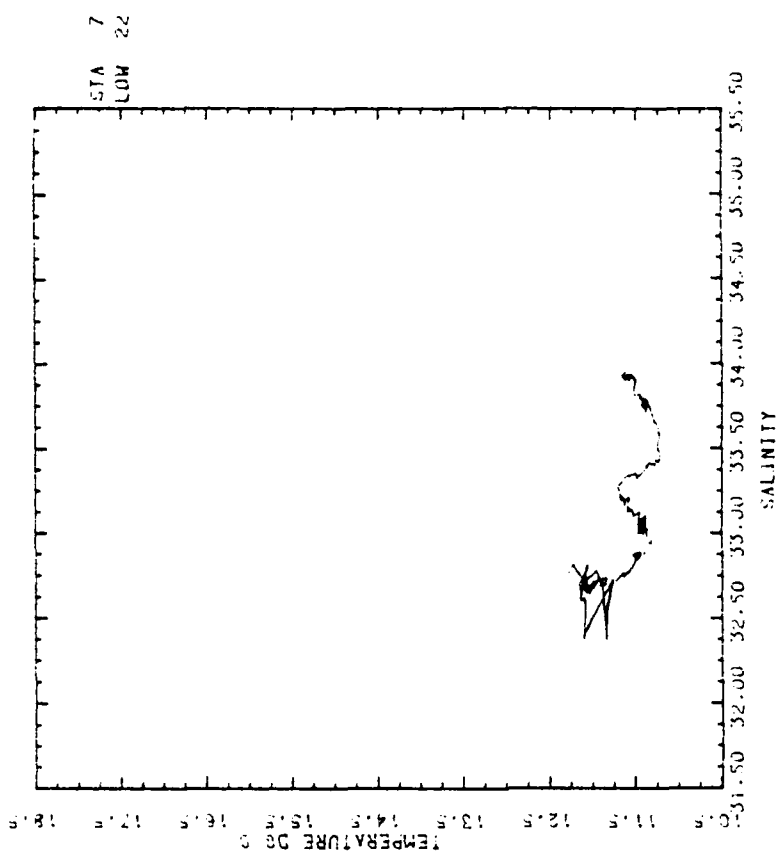
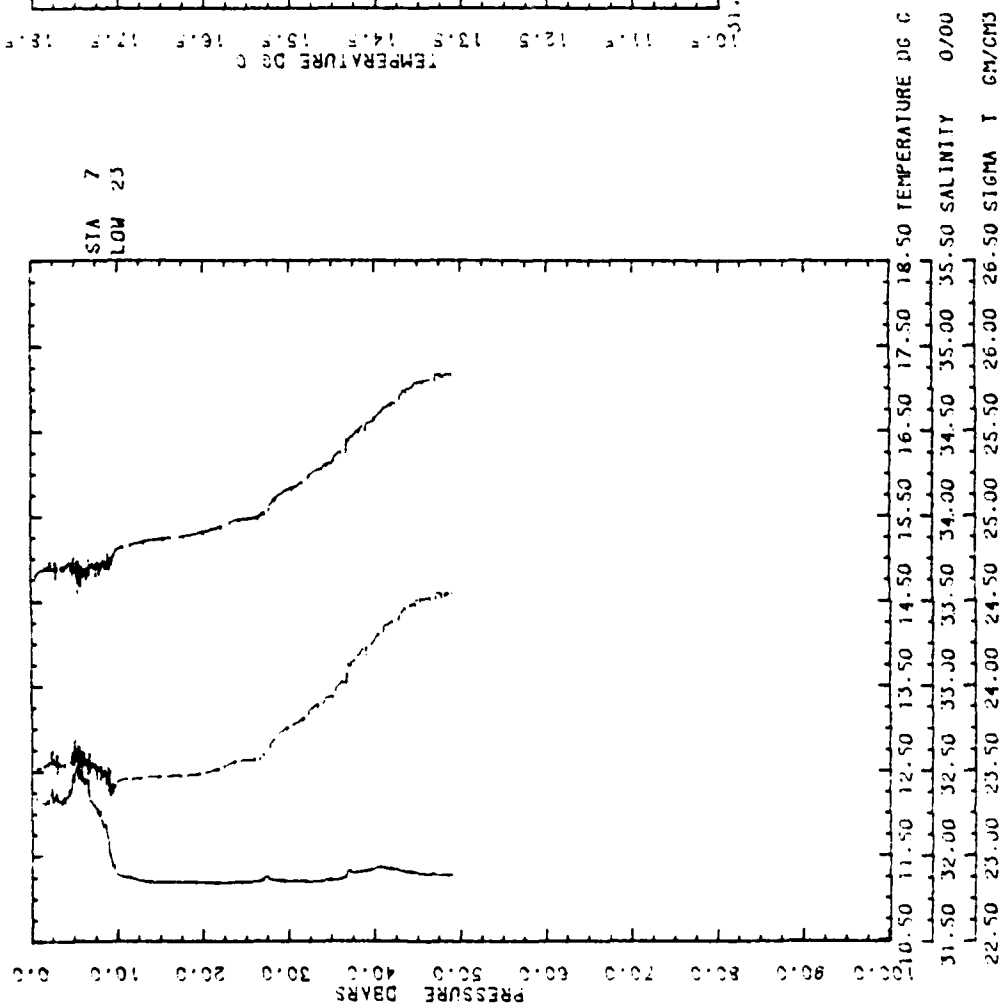


Figure A.22





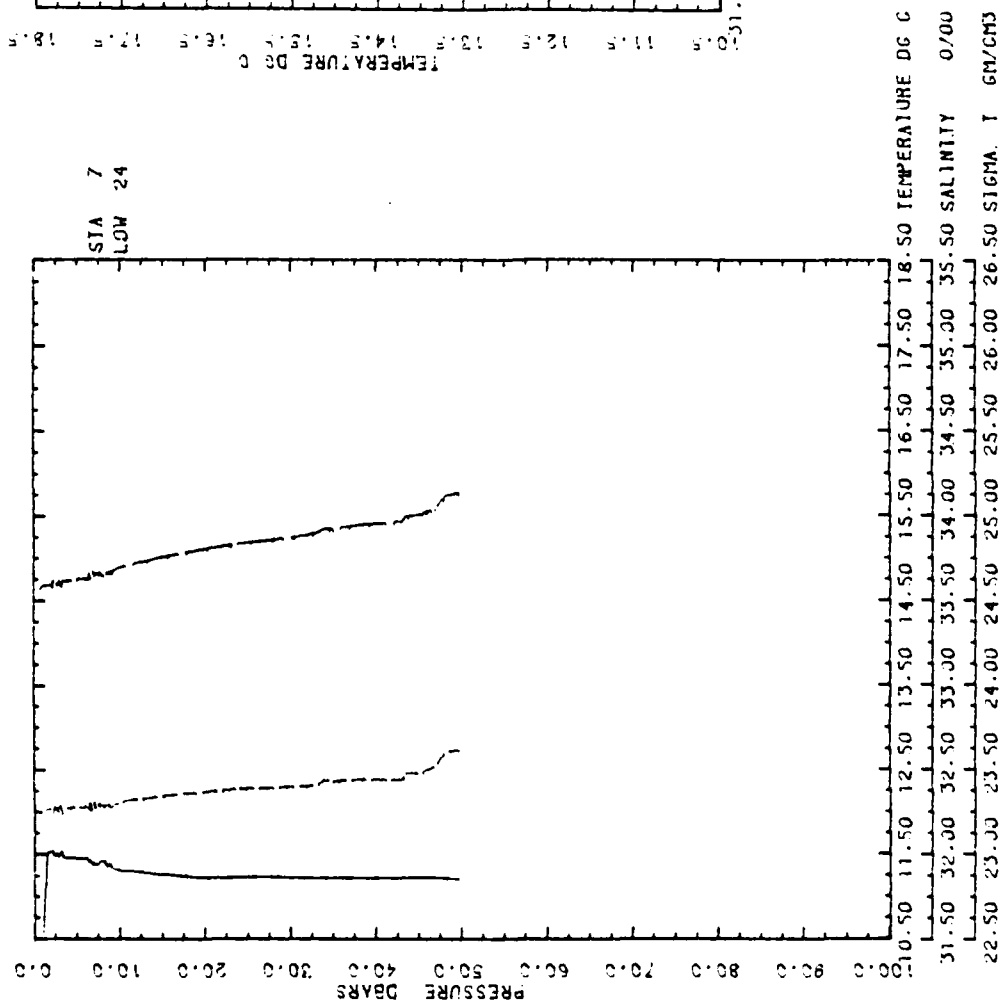


Figure A.24

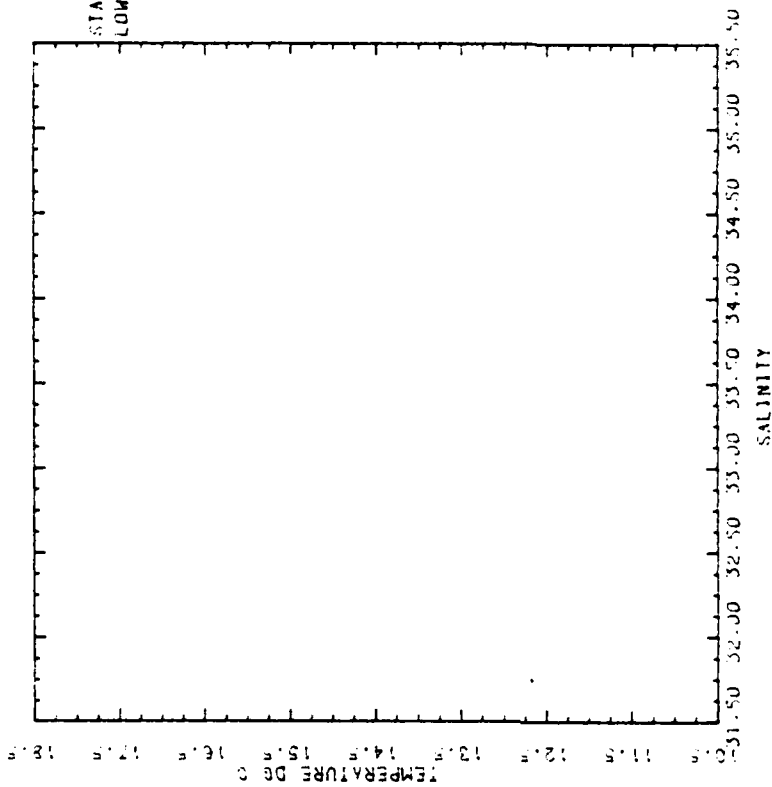
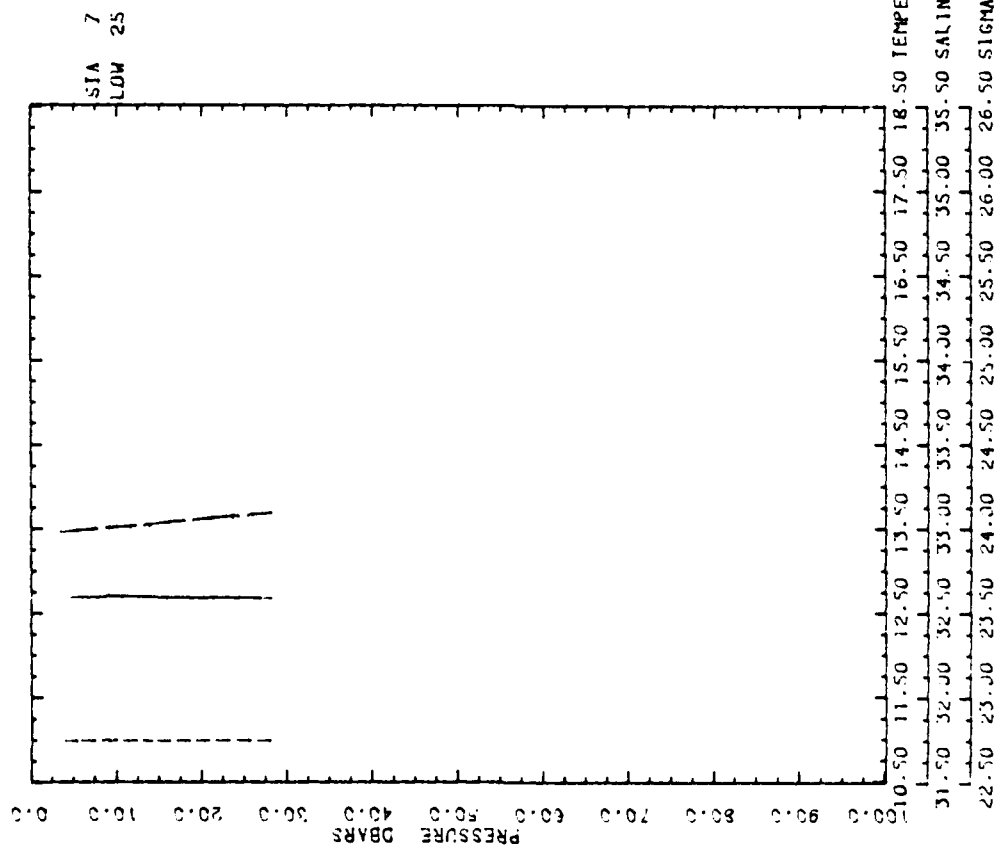


Figure A.25

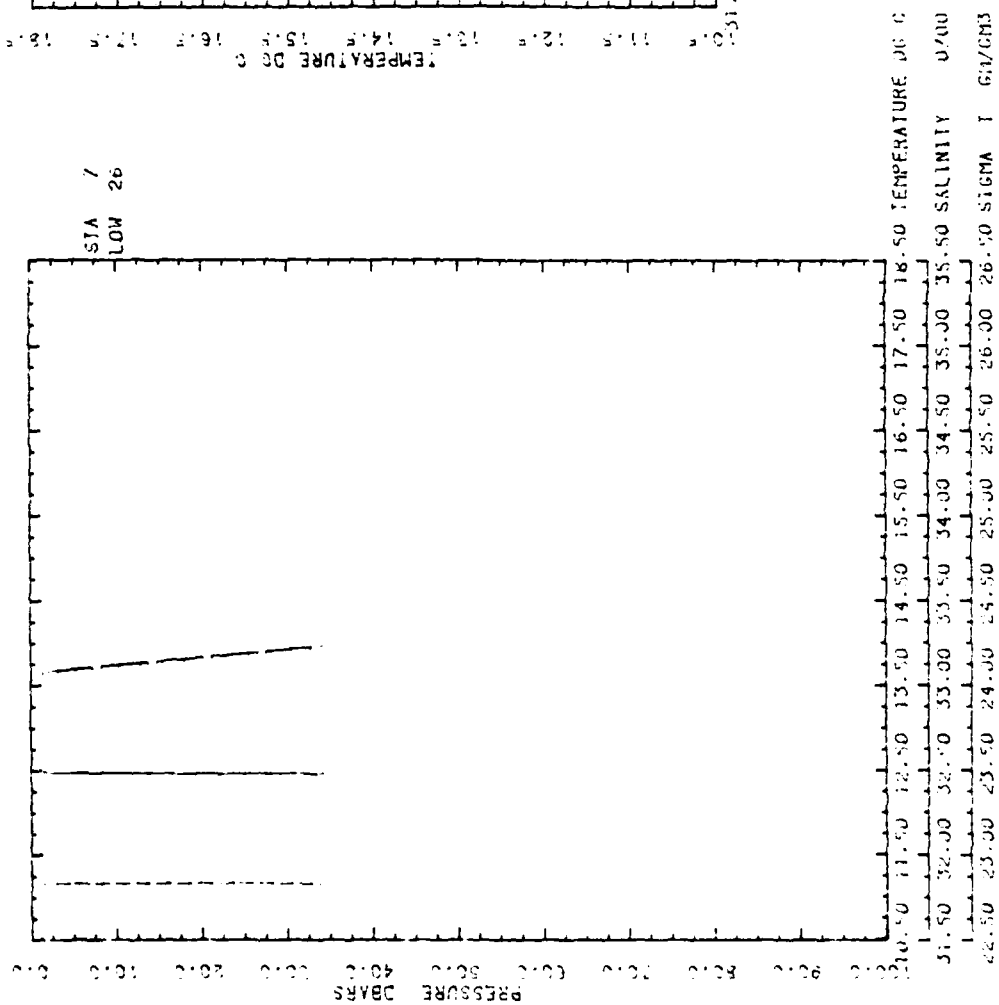


Figure A.26

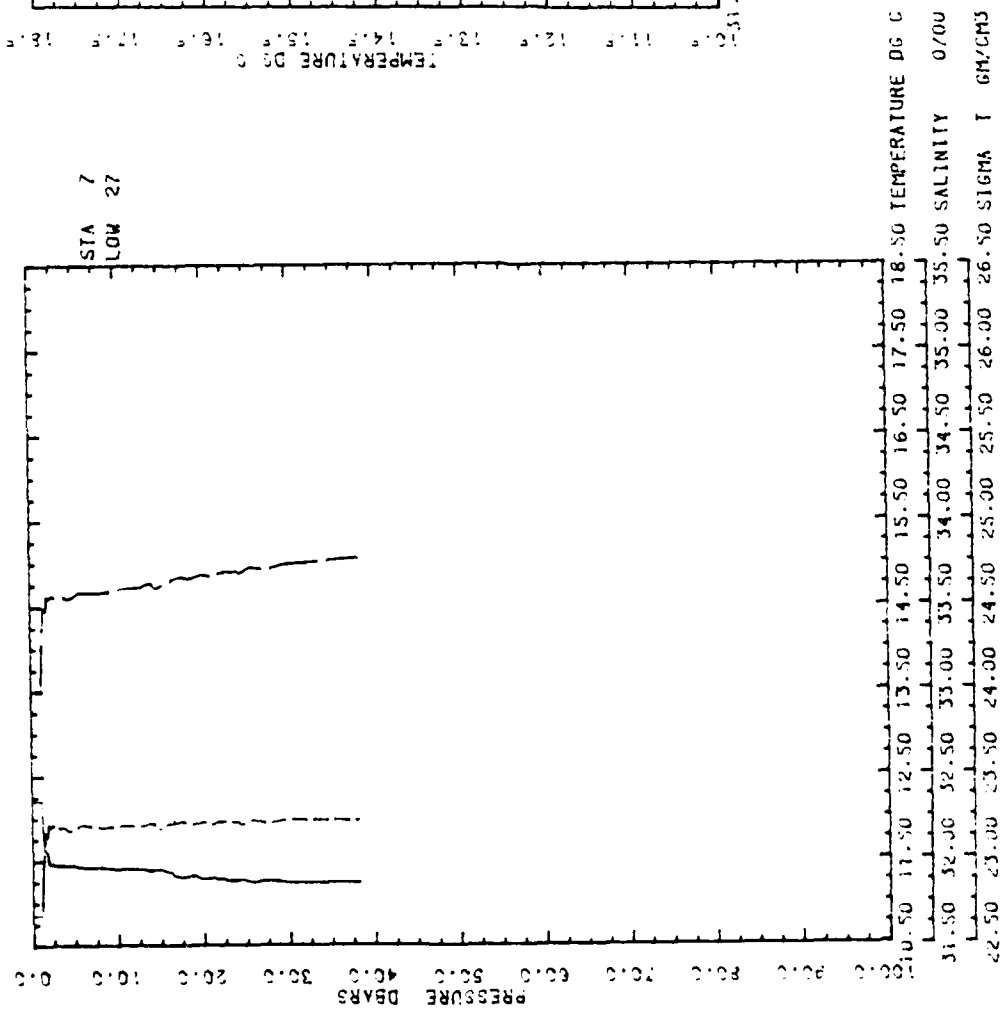


Figure A.27





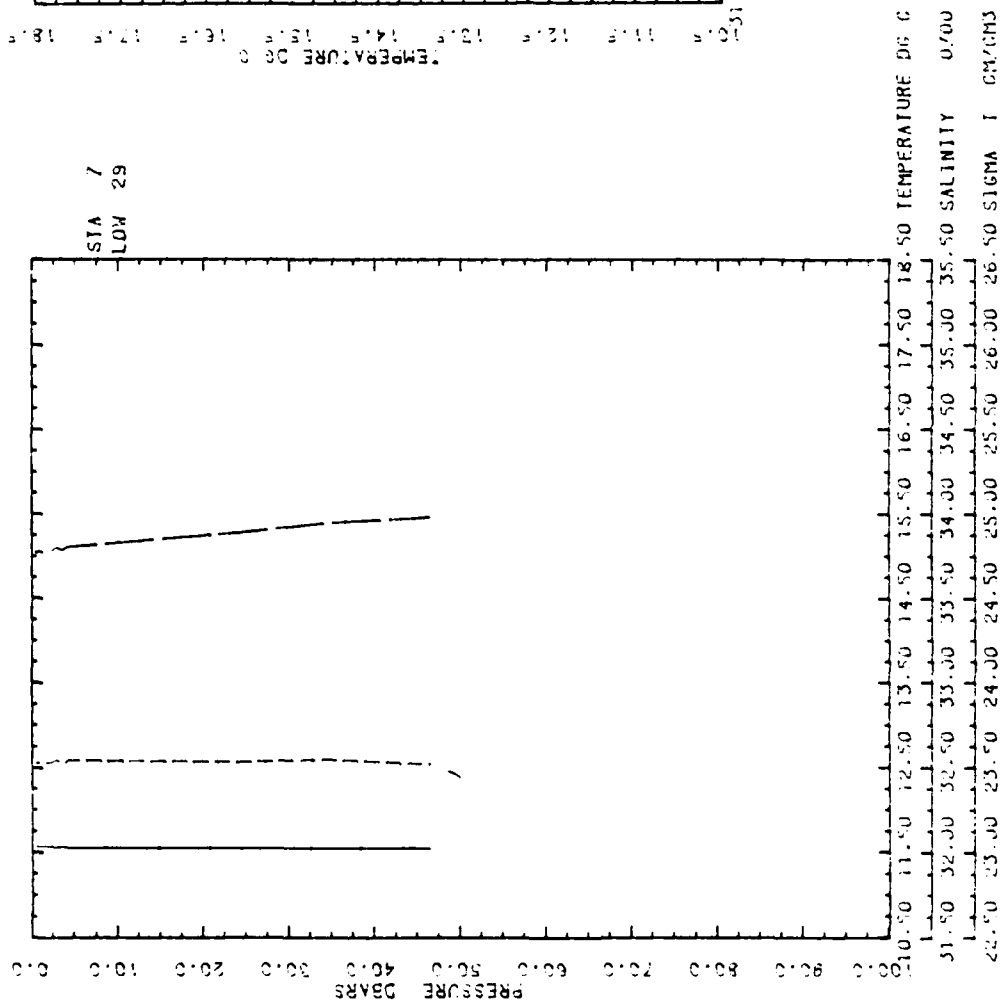


Figure A.29

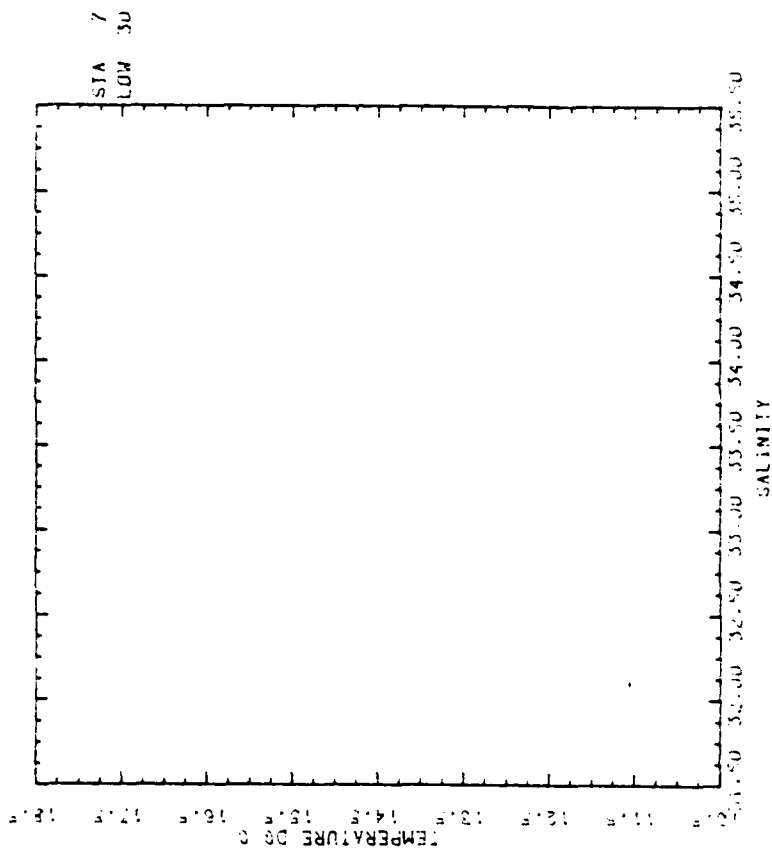
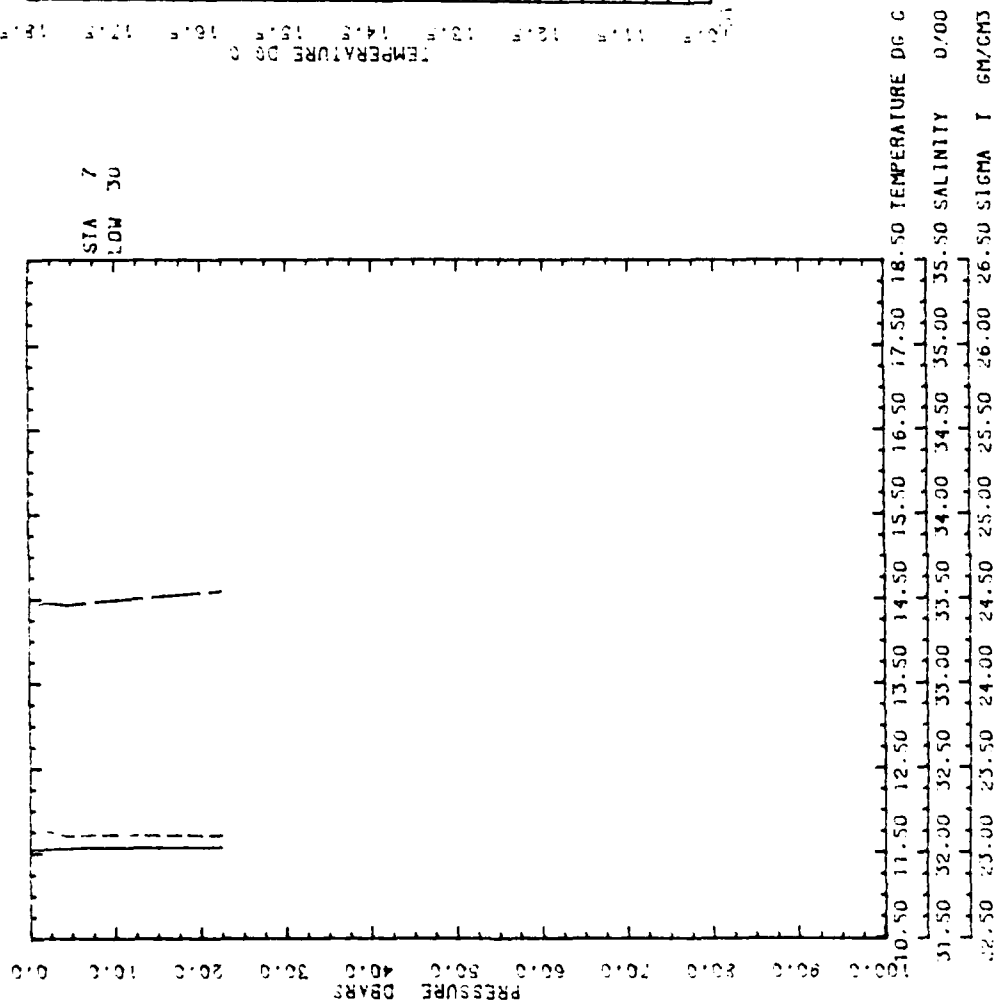


Figure A.30

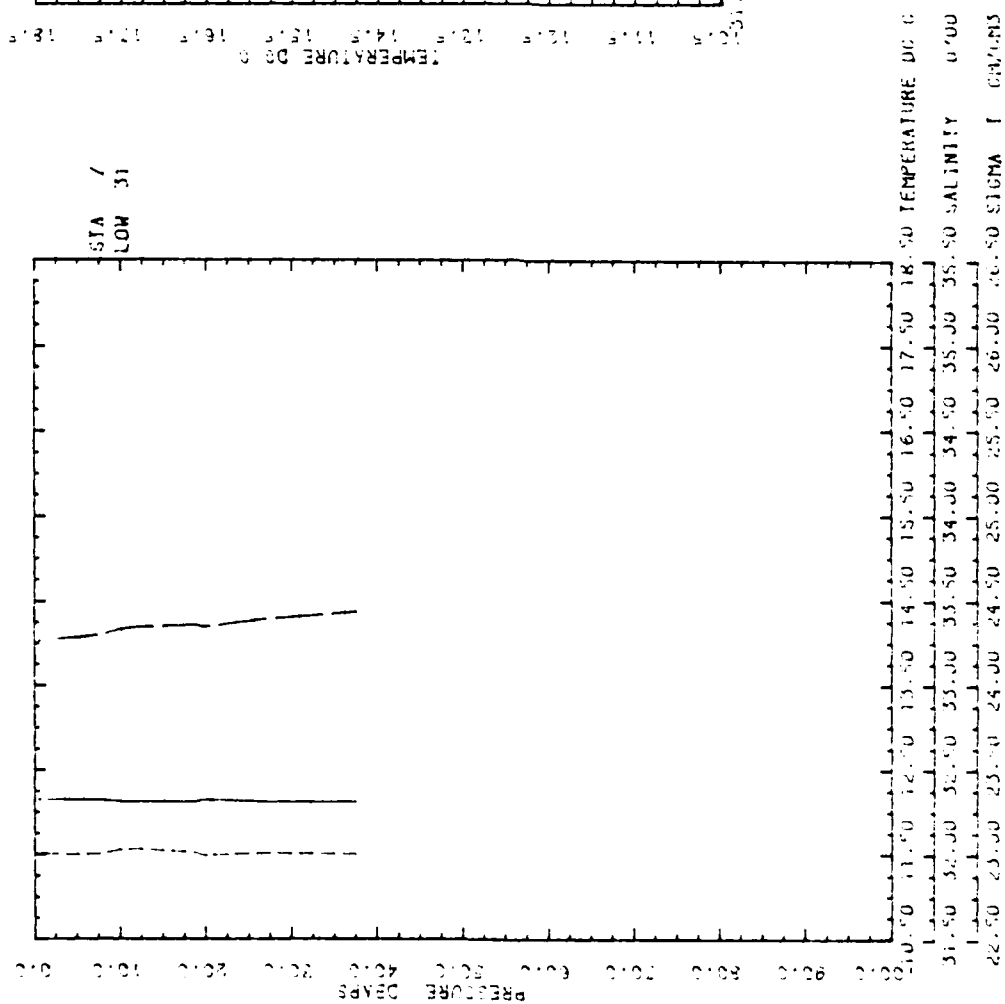


Figure A.31

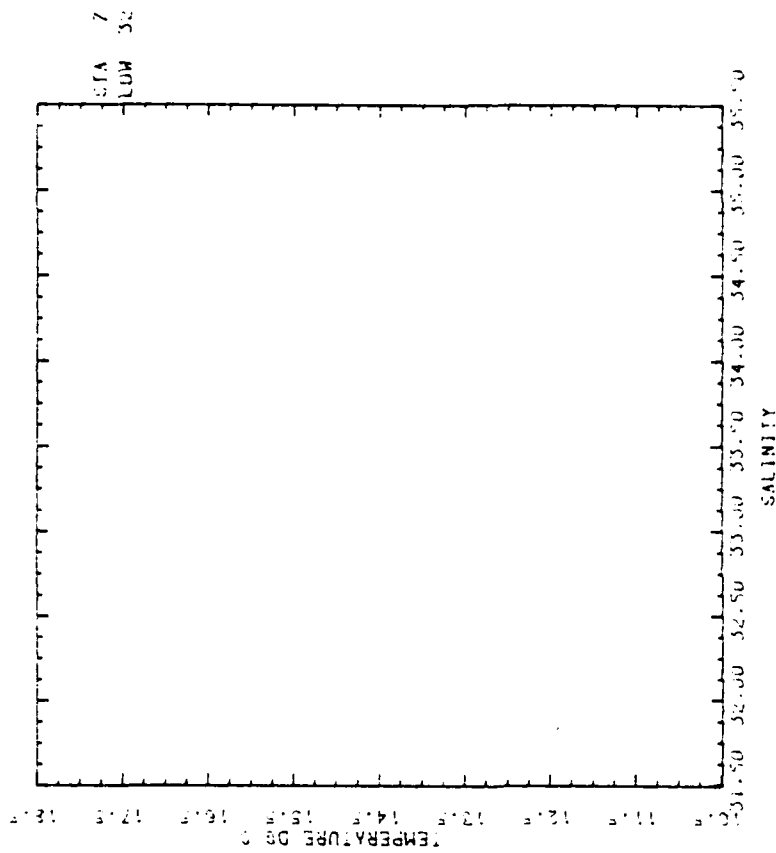
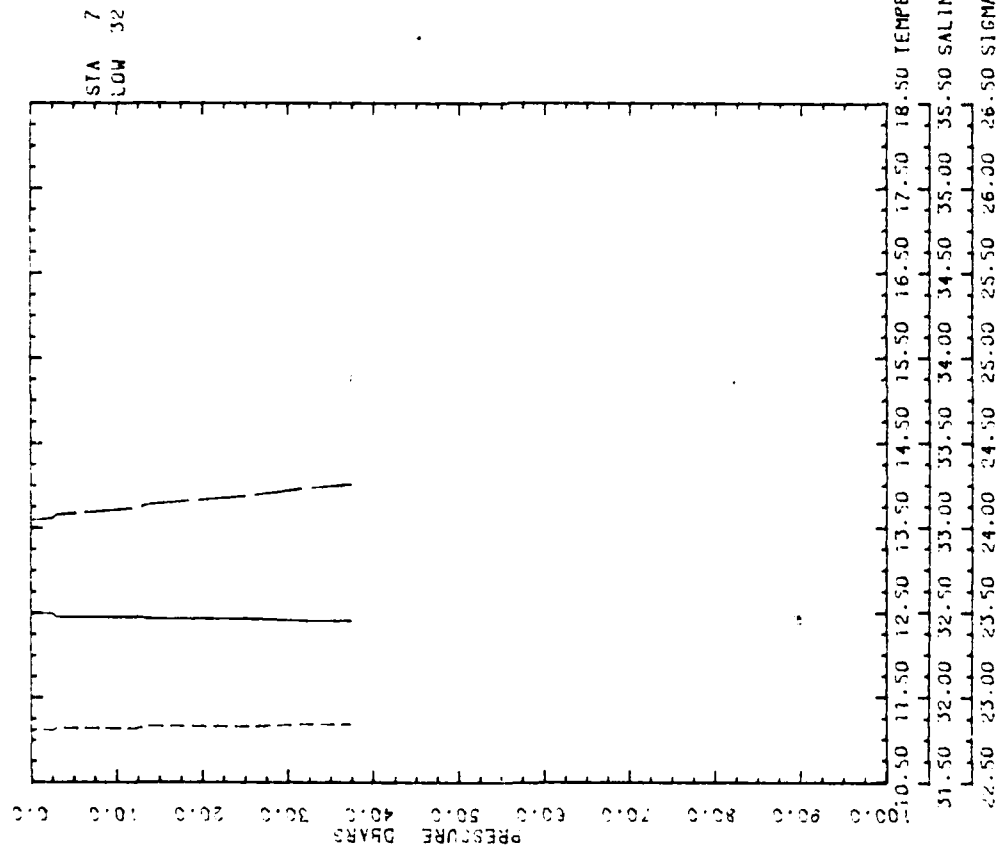


Figure A.32



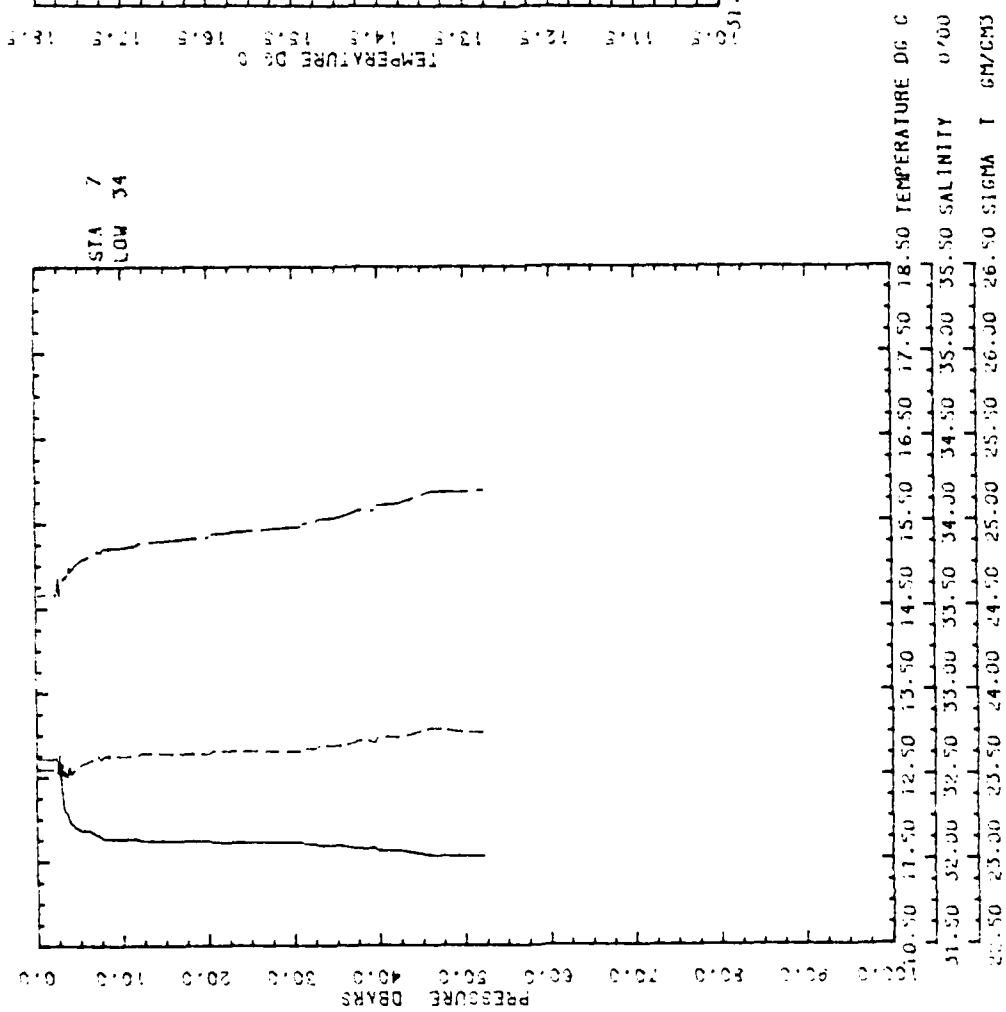
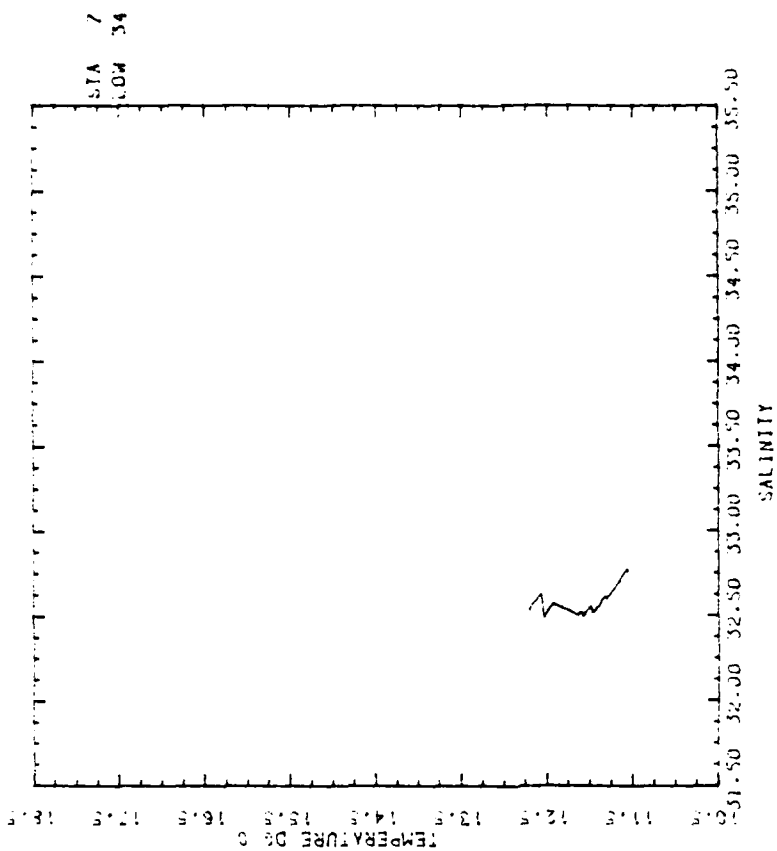


Figure A.34



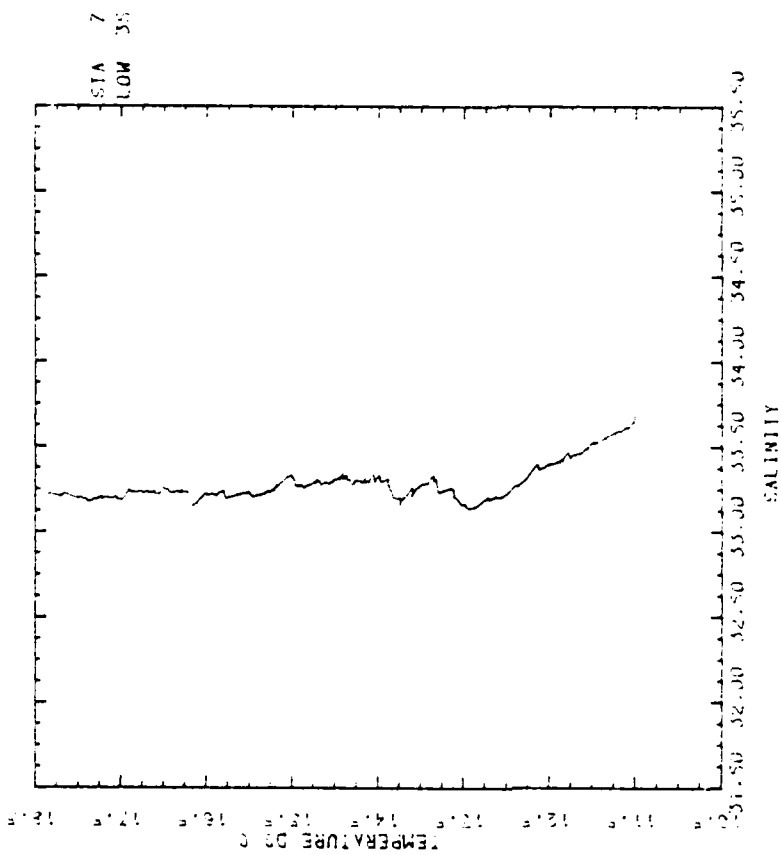
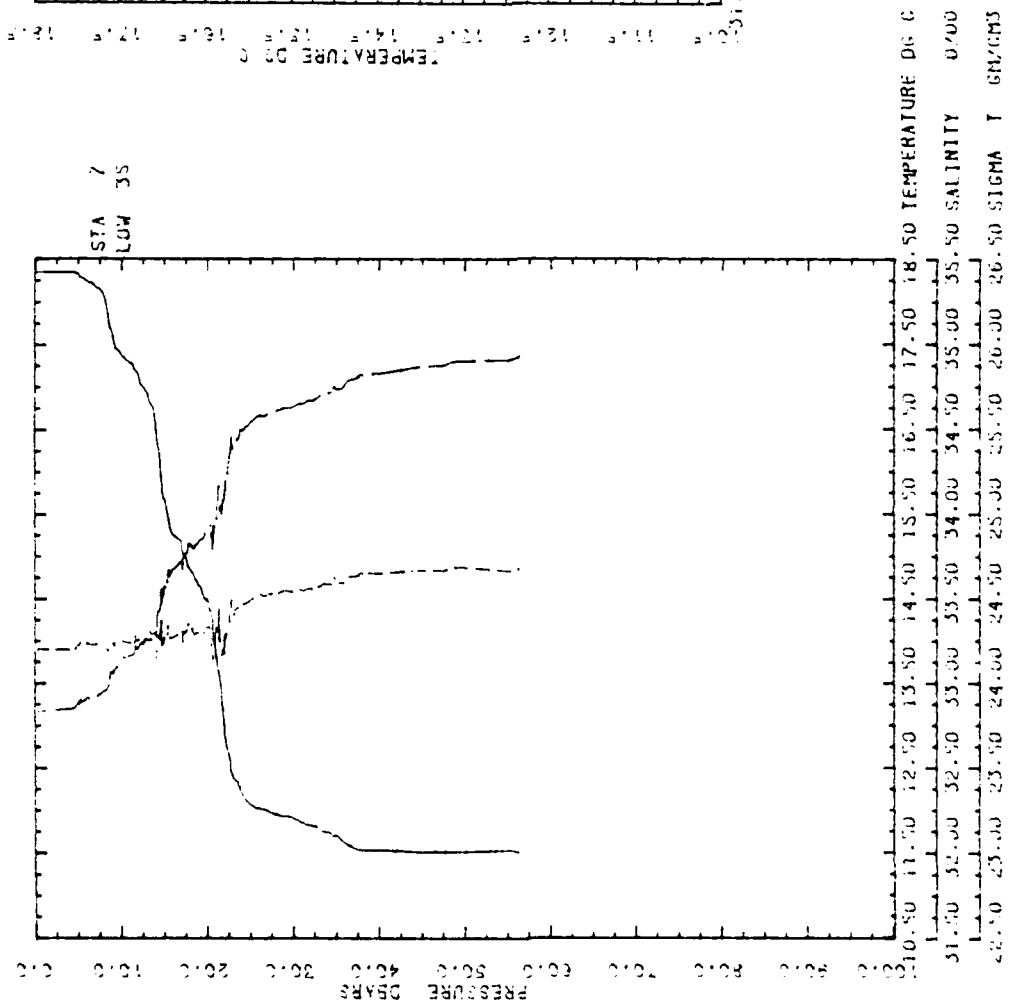


Figure A.35



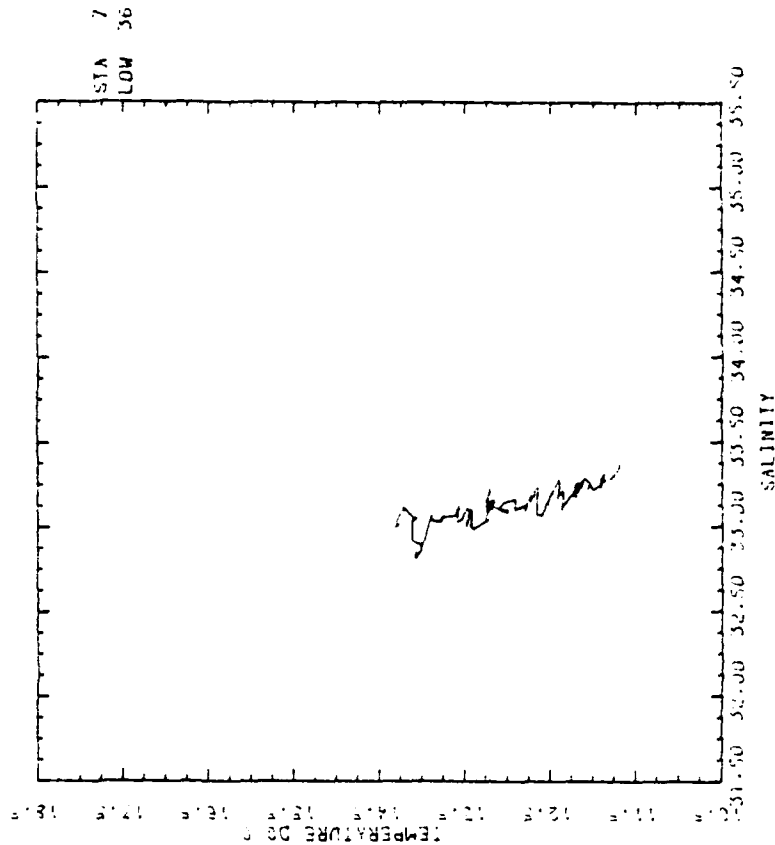
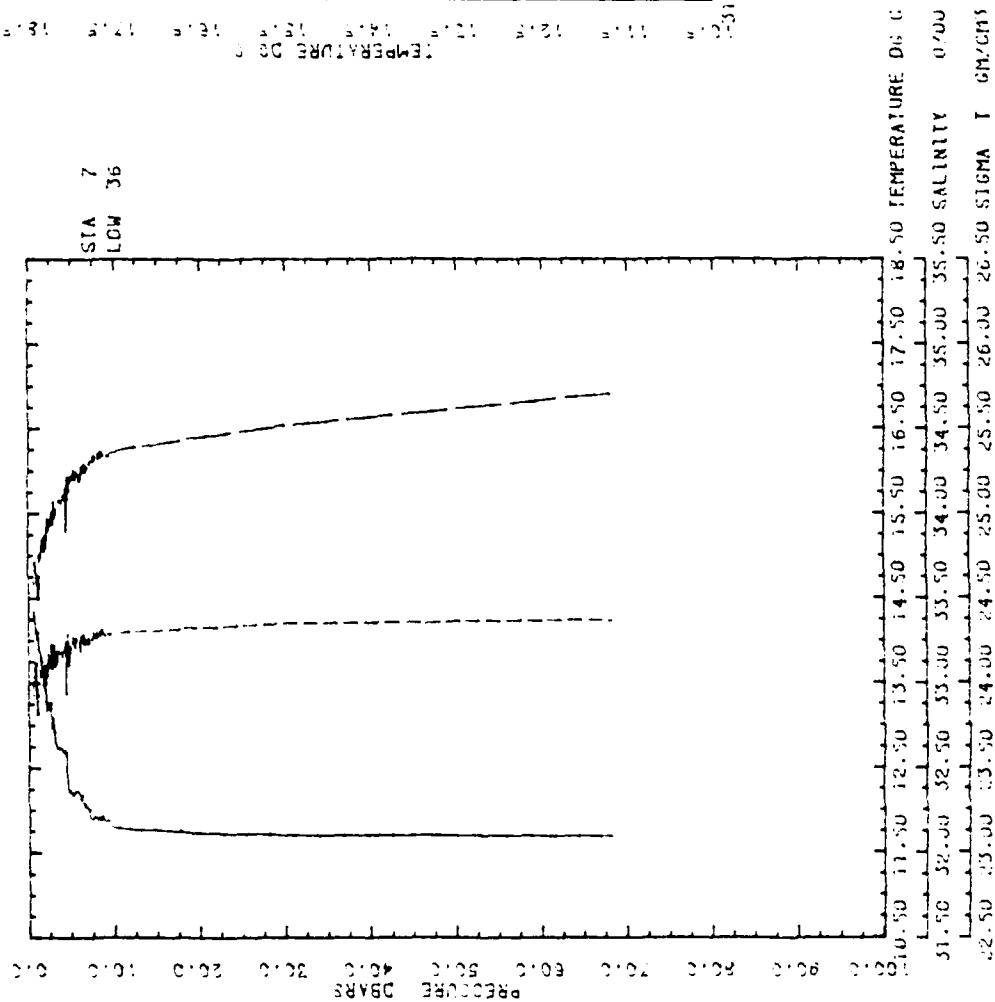


Figure A.36

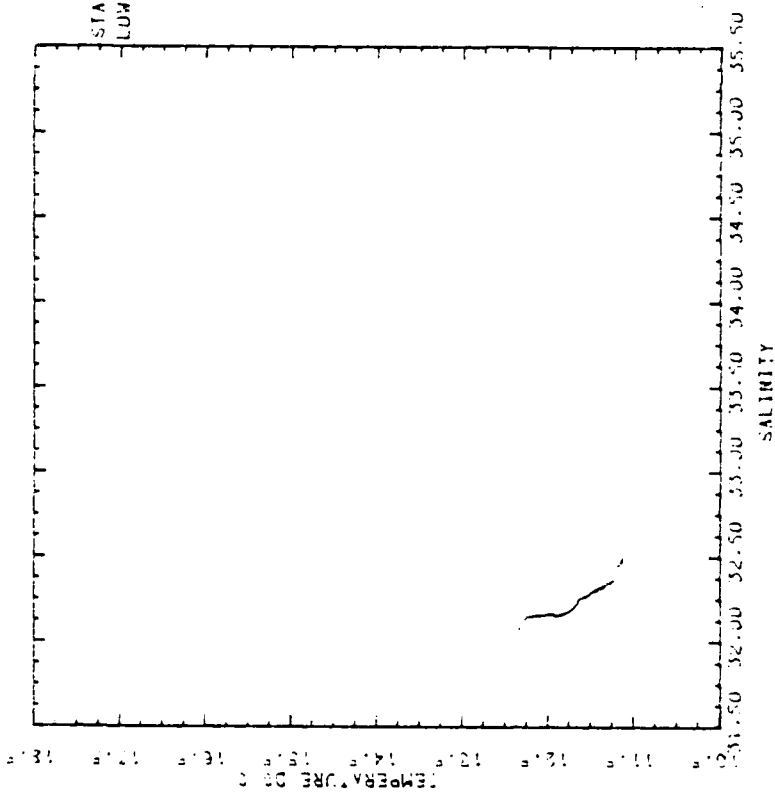
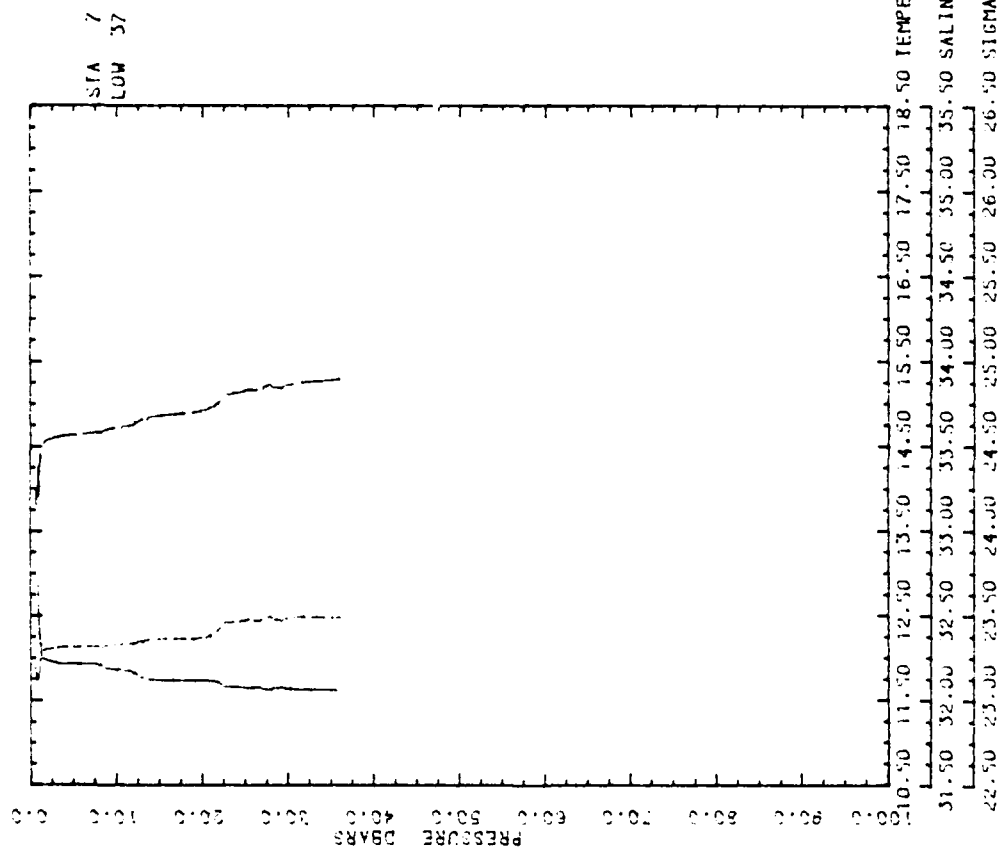


Figure A.37

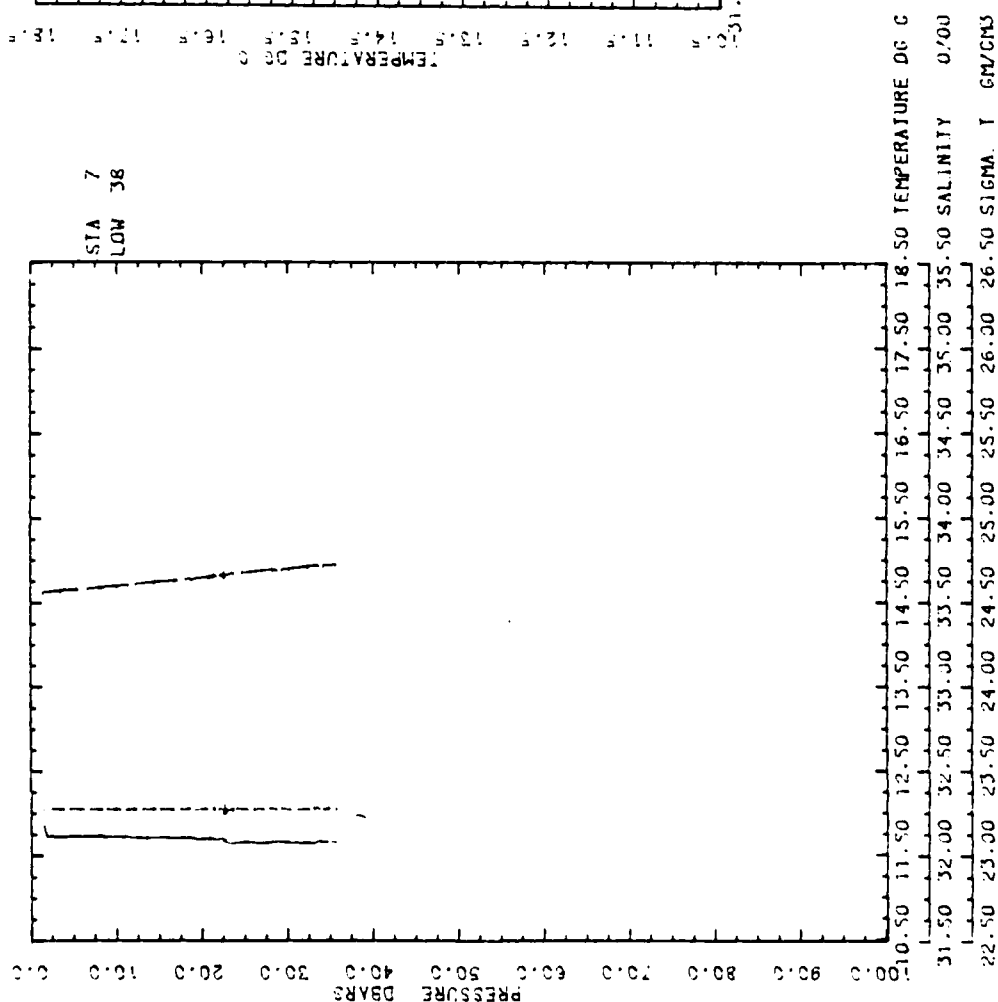


Figure A.38

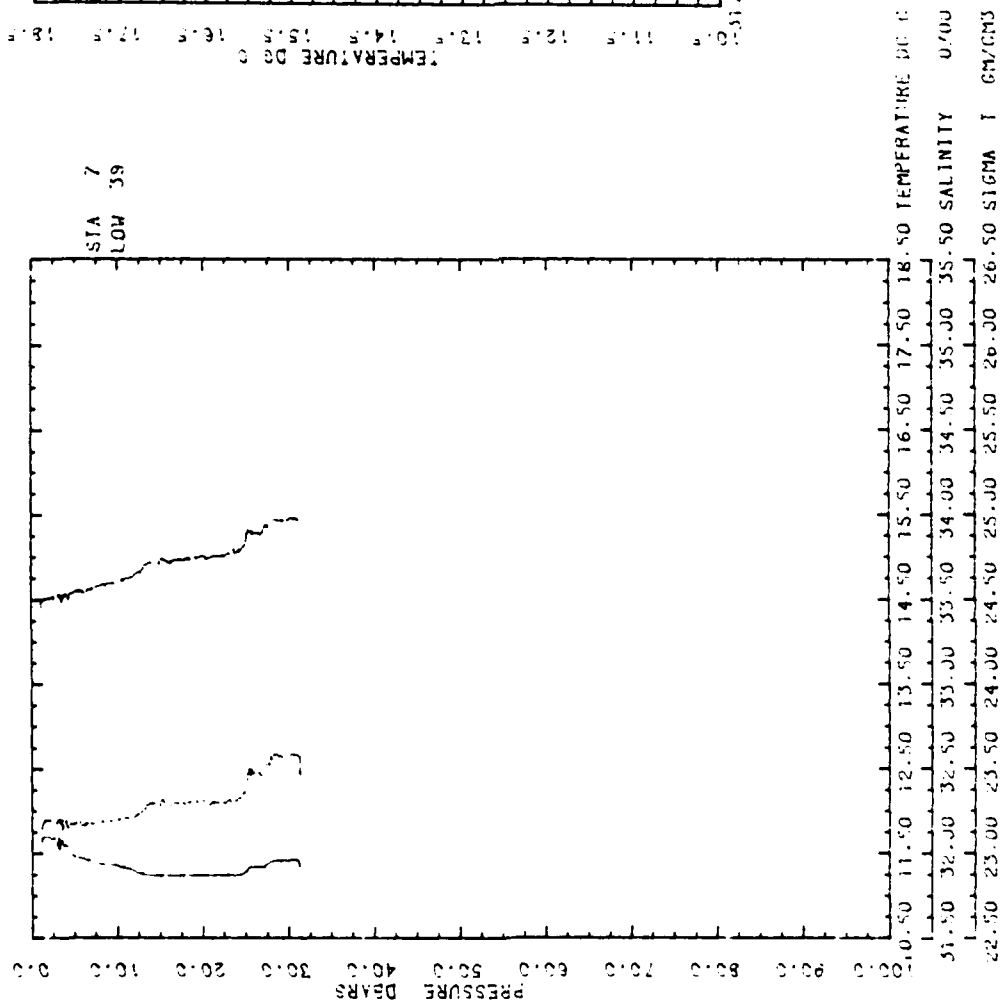


Figure A.39

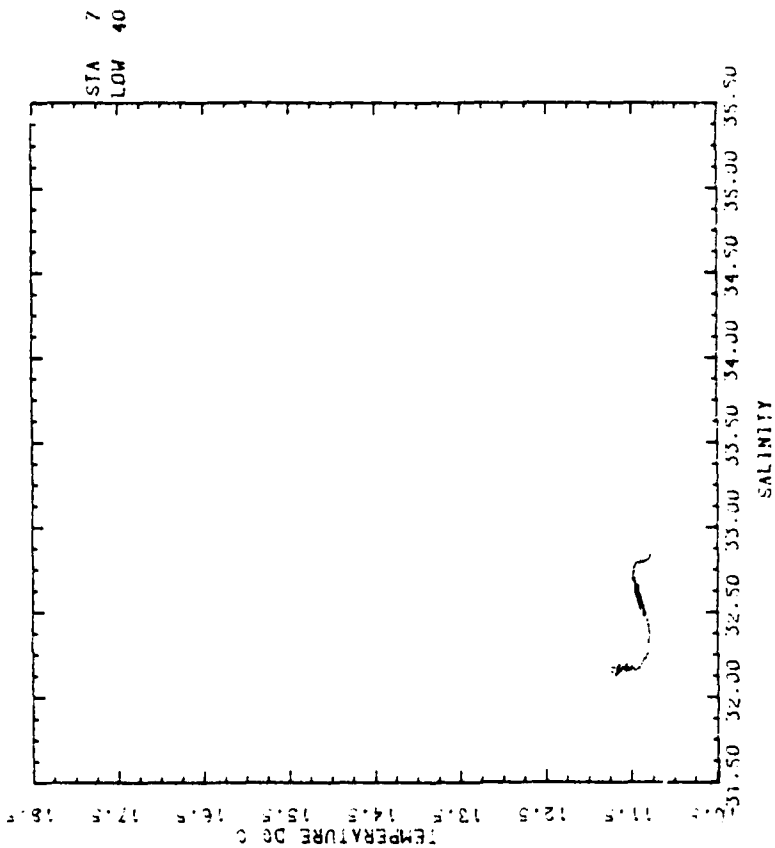
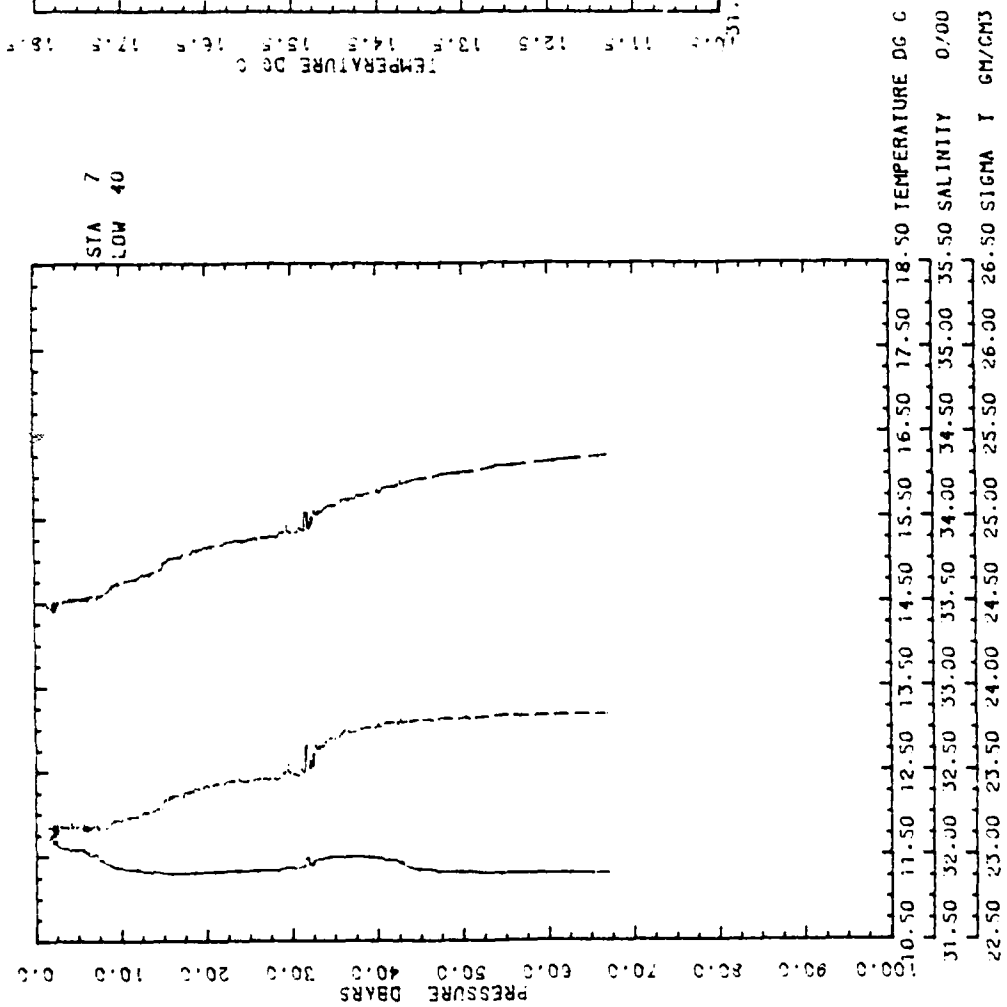


Figure A.40



## APPENDIX B. TABULATIONS OF CTD DATA

Lowerings 1 to 41 are tabulated sequentially in Tables. The data was processed in accordance with IV-A. After pressure reversal and wild point elimination, the data was averaged over 1 meter bins. Depth, temperature, conductivity, salinity and sigma-T are tabulated. The average vertical velocity of the CTD for each bin is also tabulated along with counts of accepted and rejected data scans.

Lowerings 8 to 13 and 27 to 34 were hand digitized. Data was interpolated to every .1 m depth so the point counts represent this. The vertical velocity is unobtainable for these lowerings so it was omitted.

DEPTH BIN AVERAGED CTD DATA

START TIME 192723297 POSITION 40 49 00N 69 17 00W STA NO 7 LOW NO 1 INST NO 2 TAP# NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR												
BIN NO	DEAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T g/cm <sup>3</sup>	COND SM/CM	VE M/SEC	NO TOTAL	POINTS/BIN USED	WILL		
1	91	11 4392	11 4392	31 9285	24 3333	36 3383	00	1363	35	0		
2	1 41	11 3879	11 3879	31 9486	24 3820	36 3139	15	708	31	0		
3	2 53	11 3568	11 3568	31 9605	24 3818	36 2989	17	174	94	0		
4	3 51	11 3331	11 3331	31 9671	24 3961	36 2850	36	55	45	0		
5	4 47	11 3166	11 3166	31 9742	24 4094	36 2781	20	158	77	0		
6	5 53	11 3097	11 3097	31 9778	24 4176	36 2752	62	50	47	0		
7	6 40	11 3004	11 3004	31 9835	24 4294	36 2740	20	152	87	0		
8	7 54	11 2872	11 2872	31 9908	24 4423	36 2703	39	52	46	0		
9	8 46	11 2768	11 2768	31 9967	24 4543	36 2675	27	115	78	0		
10	9 50	11 2687	11 2687	32 0013	24 4637	36 2654	58	53	49	0		
11	10 50	11 2586	11 2586	32 0071	24 4738	36 2629	48	64	59	0		
12	11 55	11 2426	11 2426	32 0149	24 4883	36 2571	47	68	58	0		
13	12 49	11 2213	11 2213	32 0262	24 5060	36 2501	35	87	70	0		
14	13 49	11 2109	11 2109	32 0327	24 5182	36 2480	61	57	44	0		
15	14 57	11 1993	11 1993	32 0415	24 5336	36 2471	39	80	84	0		
16	15 47	11 1958	11 1958	32 0447	24 5399	36 2476	42	75	58	0		
17	16 52	11 1949	11 1949	32 0454	24 5462	36 2480	51	51	53	0		
18	17 54	11 1944	11 1944	32 0461	24 5507	36 2487	44	57	56	0		
19	18 50	11 1835	11 1835	32 0599	24 5704	36 2534	37	86	70	0		
20	19 48	11 1628	11 1628	32 0853	24 5973	36 2613	45	56	45	0		
21	20 52	11 1493	11 1493	32 1026	24 6191	36 2674	51	50	52	0		
22	21 47	11 1074	11 1074	32 1581	24 6726	36 2870	37	115	84	0		
23	22 46	11 0936	11 0936	32 1751	24 6918	36 2923	75	41	36	0		
24	23 41	11 0803	11 0803	32 1913	24 7126	36 2973	01	3322	79	0		
25	24 41	11 0686	11 0686	32 2039	24 7281	36 3001	21	146	94	0		
26	25 54	11 0581	11 0581	32 2115	24 7386	36 2990	45	58	54	0		
27	26 40	11 0521	11 0521	32 2188	24 7539	36 3015	19	160	84	0		
28	27 56	11 0408	11 0408	32 2335	24 7757	36 3067	31	106	87	0		
29	28 48	11 0315	11 0315	32 2443	24 7853	36 3097	22	134	91	0		
30	29 54	11 0260	11 0260	32 2511	24 7983	36 3122	41	76	83	0		
31	30 45	11 0231	11 0231	32 2556	24 8057	36 3145	24	128	80	0		
32	31 59	11 0218	11 0218	32 2607	24 8153	36 3190	24	128	86	0		
33	32 43	11 0208	11 0208	32 2663	24 8218	36 3241	36	88	73	0		
34	33 57	11 0193	11 0193	32 2713	24 8350	36 3284	51	60	53	0		
35	34 40	11 0187	11 0187	32 2738	24 8418	36 3307	19	164	89	0		
36	35 55	11 0169	11 0169	32 2811	24 8519	36 3370	41	76	55	0		
37	36 45	11 0095	11 0095	32 3047	24 8745	36 3545	21	144	93	0		
38	37 47	10 9879	10 9879	32 3625	24 9303	36 3941	35	91	74	0		
39	38 49	10 9788	10 9788	32 3841	24 9550	36 4065	21	150	94	0		
40	39 45	10 9735	10 9735	32 3965	24 9689	36 4165	48	64	55	0		
41	40 57	10 9669	10 9669	32 4152	24 9912	36 4300	19	161	58	0		
42	41 44	10 9593	10 9593	32 4342	24 10077	36 4428	57	55	46	0		
43	42 57	10 9541	10 9541	32 4487	24 10315	36 4533	21	149	73	0		
44	43 48	10 9570	10 9570	32 4593	24 10245	36 4467	42	71	58	0		
45	44 44	10 9646	10 9646	32 4211	24 10084	36 4355	01	2196	124	0		
46	45 52	10 9542	10 9542	32 4546	24 10444	36 4604	10	290	95	0		
47	46 44	10 9444	10 9444	32 4790	24 10667	36 4768	13	252	31	0		
48	47 54	10 9428	10 9428	32 4818	24 10785	36 4785	12	255	31	0		
49	48 34	10 9412	10 9412	32 4887	24 10906	36 4845	11	281	35	0		
50	49 44	10 9376	10 9376	32 5022	24 1071	36 4953	12	252	31	0		
51	50 57	10 9346	10 9346	32 5126	24 1216	36 5036	02	1562	100	0		

MAXIMUM DEPTH OF CAST = 51.000



DEPTH BIN AVERAGED CTD DATA

START TIME 193700Z POSITION 40 49 84N 69 13 50W STA NO 710W NO INST NO 21 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
BTN NO	DKR M	FAST-T DEG-C	ACCUR-T DEG-C	SHL PPT	SIGMA-T G/CM43	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	BIN WTD	
1	03	12 1414	12 1414	32 1343	24 3650	37 1745	92	444	34	0	
2	04	12 1151	12 1151	32 1304	24 3702	37 1481	14	218	55	0	
3	05	12 0823	12 0823	32 1333	24 3828	37 1212	26	117	80	0	
4	06	11 0832	11 0832	32 1447	24 4485	36 3844	23	136	79	0	
5	07	11 0651	11 0651	32 1533	24 5032	36 3816	42	168	49	0	
6	08	11 4335	11 4335	32 1930	24 5630	36 6056	31	96	74	1	
7	09	11 4160	11 4160	32 2035	24 5807	36 6011	51	101	74	1	
8	10	11 4125	11 4125	32 2031	24 5845	36 5979	42	74	62	0	
9	11	11 4110	11 4110	32 2039	24 5903	36 5978	53	60	47	0	
10	12	11 4098	11 4098	32 2070	24 5983	36 6004	24	129	86	0	
11	13	11 3740	11 3740	32 2102	24 6100	36 5721	51	60	51	1	
12	14	11 1920	11 1920	32 2757	24 7001	36 4771	51	60	45	0	
13	15	11 0689	11 0689	32 3698	24 7987	36 4632	34	92	70	1	
14	16	10 9998	10 9998	32 4505	24 8789	36 4837	42	76	67	0	
15	17	10 9784	10 9784	32 4942	24 9228	36 5091	40	77	57	0	
16	18	10 9674	10 9674	32 5180	24 9470	36 5235	35	89	54	0	
17	19	10 9558	10 9558	32 5420	24 9723	36 5379	56	47	42	0	
18	20	10 9334	10 9334	32 5890	25 0174	36 5655	63	49	46	0	
19	21	10 9232	10 9232	32 6074	25 0384	36 5752	74	133	86	0	
20	22	10 9041	10 9041	32 6498	25 0794	36 6014	77	40	37	0	
21	23	10 8969	10 8969	32 6655	25 0999	36 6111	47	65	52	0	
22	24	10 8843	10 8843	32 7610	25 1800	36 6963	34	90	70	0	
23	25	10 8737	10 8737	32 8283	25 2356	36 7548	54	59	51	0	
24	26	10 8728	10 8728	32 8549	25 2612	36 7857	40	78	66	0	
25	27	10 8858	10 8858	32 8733	25 2832	36 8118	38	81	65	0	
26	28	10 8940	10 8940	32 8945	25 2985	36 8410	55	56	48	0	
27	29	10 8965	10 8965	32 8944	25 3055	36 8436	53	60	55	0	
28	30	10 8969	10 8969	32 8944	25 3117	36 8444	38	82	65	0	
29	31	10 9199	10 9199	32 9501	25 3531	36 9215	45	68	52	0	
30	32	10 9175	10 9175	32 9356	25 3449	36 9052	45	71	55	0	
31	33	10 9433	10 9433	32 9966	25 3896	36 9903	41	73	62	0	
32	34	10 9599	10 9599	33 0157	25 4159	37 0250	62	51	44	0	
33	35	10 9700	10 9700	33 041	25 4381	37 0607	43	71	61	0	
34	36	10 9745	10 9745	33 057	25 4527	37 0819	33	95	76	0	
35	37	10 9817	10 9817	33 10	25 5012	37 1348	60	50	41	0	
36	38	10 9851	10 9851	33 1164	25 5078	37 1510	01	4834	122	0	
37	39	10 9881	10 9881	33 1326	25 5233	37 1704	20	147	77	0	
38	40	10 9973	10 9973	33 1952	25 5766	37 2429	49	65	57	0	
39	41	11 0006	11 0006	33 2043	25 5900	37 2547	33	137	86	0	
40	42	11 0017	11 0017	33 2108	25 5930	37 2628	56	55	49	0	
41	43	11 0053	11 0053	33 2418	25 6188	37 2977	42	73	58	0	
42	44	11 0078	11 0078	33 2560	25 6403	37 3147	34	94	69	0	
43	45	11 0090	11 0090	33 2664	25 6607	37 3267	53	58	49	0	
44	46	11 0117	11 0117	33 2943	25 6773	37 3577	44	70	52	0	
45	47	11 0129	11 0129	33 3011	25 6890	37 3659	28	113	88	0	
46	48	11 0133	11 0133	33 3081	25 6989	37 3739	72	48	37	0	
47	49	11 0137	11 0137	33 3119	25 6988	37 3785	59	54	48	0	
48	50	11 0139	11 0139	33 3156	25 7194	37 3828	30	102	74	0	
49	51	11 0141	11 0141	33 3223	25 7301	37 3902	45	68	48	0	
50	52	11 0145	11 0145	33 3309	25 7332	37 3996	44	72	59	0	
51	53	11 0146	11 0146	33 3351	25 7457	37 4045	42	74	62	0	
52	54	11 0147	11 0147	33 3387	25 7620	37 4084	41	75	59	0	
53	55	11 0148	11 0148	33 3408	25 7632	37 4111	13	71	55	0	
54	56	11 0150	11 0150	33 3418	25 7693	37 4119	14	212	57	0	
55	57	11 0150	11 0150	33 3402	25 7616	37 4116	11	222	62	0	

MAXIMUM DEPTH OF CAST = 55.00M

DEPTH BIN AVERAGED CTD DATA

START TIME 193/0104Z POSITION 40 49 85N 39 7 09W STA NO 7 LOW NO 3 INST NO 2 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	TOTAL	POINTS/BIN USED	WILD	
1	22	15 3331	15 3331	33 0700	24 4357	41 1043	83	30	17	1	
2	1 57	15 3189	15 3189	33 0577	24 4554	40 9840	88	35	12	0	
3	3 51	14 9687	14 9687	33 0447	24 5042	40 7358	18	108	43	0	
4	5 56	14 3926	14 3926	33 1333	24 7003	40 2949	43	74	60	0	
5	4 44	13 8474	13 8474	33 1143	24 8041	39 7669	23	133	85	0	
6	5 58	13 4800	13 4800	33 1200	24 8879	39 4326	40	78	55	0	
7	6 44	13 3345	13 3345	33 1137	24 9170	39 2913	33	138	46	1	
8	7 50	13 2955	13 2955	33 1196	24 9347	39 2620	25	118	71	0	
9	8 49	13 2387	13 2387	33 1205	24 9516	39 2108	39	79	57	0	
10	9 48	13 0112	13 0112	33 1252	25 0061	39 0059	24	133	91	0	
11	10 44	12 7172	12 7172	33 1487	25 0451	38 7595	33	97	28	1	
12	11 64	12 6236	12 6236	33 1537	25 1133	38 6791	24	127	21	0	
13	12 40	12 6089	12 6089	33 1633	25 1271	38 6758	31	102	76	0	
14	13 63	12 5241	12 5241	33 1844	25 1667	38 6202	19	162	78	0	
15	14 50	12 4487	12 4487	33 1800	25 1831	38 5465	49	63	50	0	
16	15 50	12 4203	12 4203	33 1942	25 2018	38 5355	19	167	83	0	
17	16 49	12 3293	12 3293	33 2031	25 2327	38 4615	17	177	94	0	
18	17 55	12 2899	12 2899	33 2137	25 2524	38 4366	16	192	84	1	
19	18 52	12 2626	12 2626	33 2142	25 2625	38 4124	34	208	49	0	
20	19 54	12 2073	12 2073	33 2199	25 2845	38 3678	42	72	50	0	
21	20 51	12 1579	12 1579	33 2341	25 3060	38 3375	31	100	84	0	
22	21 45	12 1031	12 1031	33 2132	25 3079	38 2659	51	60	51	0	
23	22 52	11 9876	11 9876	33 2370	25 3536	38 1846	36	48	44	0	
24	23 54	11 9398	11 9398	33 2611	25 3859	38 1680	24	127	34	0	
25	24 47	11 8671	11 8671	33 2643	25 4065	38 1028	33	37	31	0	
26	25 54	11 7933	11 7933	33 2741	25 4332	38 0455	23	34	31	0	
27	26 59	11 6527	11 6527	33 2977	25 4853	37 9410	24	129	18	0	
28	27 48	11 4989	11 4989	33 3169	25 5269	37 8197	27	40	35	0	
29	28 54	11 4725	11 4725	33 3415	25 5585	37 8210	83	37	26	0	
30	29 64	11 4157	11 4157	33 3435	25 5752	37 7713	29	106	76	0	
31	30 46	11 3253	11 3253	33 3302	25 5874	37 6754	53	58	44	0	
32	31 53	11 2527	11 2527	33 3324	25 6104	37 6115	66	47	41	0	
33	32 53	11 2251	11 2251	33 3454	25 6277	37 5998	49	25	23	0	
34	33 46	11 2061	11 2061	33 3487	25 6357	37 5862	41	76	16	0	
35	34 53	11 1942	11 1942	33 3530	25 6495	37 5800	34	91	78	0	
36	35 53	11 1975	11 1975	33 3521	25 6491	37 5826	23	42	35	0	
37	36 51	11 1980	11 1980	33 3519	25 6554	37 5832	79	39	25	0	
38	37 54	11 1772	11 1772	33 3570	25 6692	37 5698	27	1	1	0	
39	38 52	11 1412	11 1412	33 3576	25 6783	37 5377	27	46	41	0	
40	39 52	11 1350	11 1350	33 3655	25 6923	37 5405	57	53	41	0	
41	40 52	11 1230	11 1230	33 3612	25 6936	37 5256	34	92	25	1	
42	41 49	11 0989	11 0989	33 3689	25 7115	37 5117	59	34	49	0	
43	42 54	11 0839	11 0839	33 3706	25 7239	37 5001	52	49	47	0	
44	43 50	11 0794	11 0794	33 3745	25 7276	37 5003	33	93	73	0	
45	44 51	11 0743	11 0743	33 3744	25 7382	37 4960	56	55	47	0	
46	45 54	11 0688	11 0688	33 3725	25 7393	37 4945	39	80	68	1	
47	46 46	11 0699	11 0699	33 3774	25 7411	37 4959	49	25	52	0	
48	47 55	11 0711	11 0711	33 3770	25 7434	37 4971	29	46	53	0	
49	48 61	11 0699	11 0699	33 3776	25 7403	37 4970	38	79	63	0	
50	49 51	11 0717	11 0717	33 3770	25 7720	37 4984	52	96	64	1	
51	50 47	11 0711	11 0711	33 3768	25 7637	37 4982	48	66	56	0	
52	51 53	11 0667	11 0667	33 3785	25 7711	37 4962	63	49	46	0	
53	52 54	11 0633	11 0633	33 3799	25 7828	37 4950	34	170	25	0	
54	53 50	11 0601	11 0601	33 3811	25 7877	37 4936	24	39	35	0	
55	54 54	11 0608	11 0608	33 3811	25 7874	37 4947	25	19	43	0	
56	55 41	11 0595	11 0595	33 3819	25 8025	37 4947	20	156	49	2	
57	56 54	11 0572	11 0572	33 3830	25 7939	37 4941	68	44	42	0	
58	57 59	11 0577	11 0577	33 3827	25 8047	37 4949	21	147	77	1	
59	58 49	11 0579	11 0579	33 3826	25 8096	37 4953	43	71	58	0	
60	59 46	11 0584	11 0584	33 3825	25 8068	37 4960	47	65	51	0	
61	60 55	11 0583	11 0583	33 3827	25 8156	37 4962	43	73	56	0	
62	61 39	11 0557	11 0557	33 3843	25 8276	37 4963	22	143	74	0	
63	62 50	11 0531	11 0531	33 3855	25 8316	37 4965	58	53	44	0	
64	63 53	11 0530	11 0530	33 3861	25 8366	37 4965	17	181	101	0	
65	64 53	11 0519	11 0519	33 3864	25 8391	37 4962	47	67	58	0	
66	65 47	11 0567	11 0567	33 3845	25 8458	37 4990	16	189	51	0	

MAXIMUM DEPTH OF CAST = 66.02M

AD-A132 083

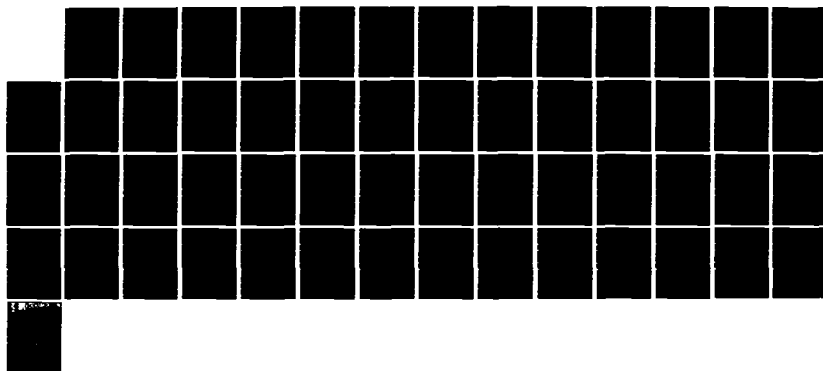
DATA VALIDATION AND SUMMARY FOR THE NRL REMOTE SENSING  
EXPERIMENT PHELPS. (U) NAVAL RESEARCH LAB WASHINGTON DC  
J A KAISER 02 SEP 83 NRL-MR-5165

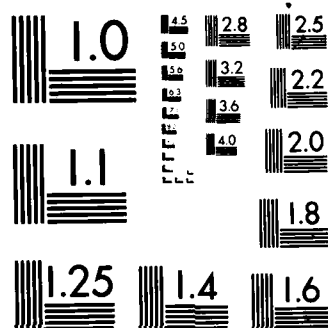
2/2

UNCLASSIFIED

F/G 8/8

NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

B DATA

START TIME 193/11437 POSITION 40 49 31N 69 2 19W STA NO 7 LOW NO 4 INST NO 2 TAPE NO 1 SWN SIZE = 1.0M DEPTH TOP = 0M BOTTOM = 100.0M SURFACE PR. S = 1.000mm											
ROW NO	DRAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/ROW USED	WIND	
1	50	2183	2183	33 1267	24 4317	40 9498	79	3	2	0	
2	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
3	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
4	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
5	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
6	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
7	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
8	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
9	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
10	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
11	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
12	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
13	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
14	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
15	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
16	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
17	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
18	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
19	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
20	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
21	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
22	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
23	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
24	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
25	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
26	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
27	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
28	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
29	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
30	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
31	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
32	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
33	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
34	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
35	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
36	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
37	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
38	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
39	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
40	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
41	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
42	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
43	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
44	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
45	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
46	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
47	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
48	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
49	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
50	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
51	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
52	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
53	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
54	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
55	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
56	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
57	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
58	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
59	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
60	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
61	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
62	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
63	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
64	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
65	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
66	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
67	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
68	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
69	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
70	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
71	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
72	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
73	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
74	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
75	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
76	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
77	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
78	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	
79	50	2184	2184	33 1267	24 4317	40 9498	79	3	2	0	

MAXIMUM DEPTH OF CAST = 79.51M

DEPTH BIN AVERAGED CTD DATA

START TIME 1973/0230Z POSITION 41 54 RUN 37 1.15W STA NO 7 LOW NO 5 INST NO 2 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0M BOTTOM = 100.0M SURFACE PRESS = 1.000BAR												
BIN NO	DRAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM <sup>3</sup>	COND CM/CM	VEL M/SEC	NO TOTAL	POINTS BIN USED	POINTS BIN ATTD		
1	1 06	11 2734	11 2734	32 3643	24 9829	38 1557	43	11	11	0		
2	1 76	11 9502	11 9502	32 9082	25 0037	37 8029	44	11	11	0		
3	1 80	11 6563	11 6563	32 9885	25 1358	37 6180	21	142	32	0		
4	3 63	11 5557	11 5557	33 0250	25 1364	37 5640	38	83	35	0		
5	4 73	11 5027	11 5027	33 0344	25 1997	37 5258	29	19	35	0		
6	5 74	11 4800	11 4800	33 0466	25 2171	37 5179	43	71	54	0		
7	6 65	11 4428	11 4428	33 0579	25 2371	37 4950	35	82	59	0		
8	7 70	11 4176	11 4176	33 0698	25 2553	37 4857	45	69	52	0		
9	8 69	11 4165	11 4165	33 0704	25 2632	37 4857	70	14	32	0		
10	9 69	11 4171	11 4171	33 0710	25 2671	37 4872	75	41	36	0		
11	10 74	11 4153	11 4153	33 0726	25 2736	37 4876	35	39	75	0		
12	11 65	11 4166	11 4166	33 0718	25 2753	37 4883	52	59	52	0		
13	12 69	11 4119	11 4119	33 0747	25 2862	37 4876	69	45	40	0		
14	13 69	11 4074	11 4074	33 0778	25 2943	37 4871	60	51	44	0		
15	14 71	11 4048	11 4048	33 0793	25 2984	37 4867	53	50	45	0		
16	15 69	11 4027	11 4027	33 0807	25 3063	37 4865	87	46	41	0		
17	16 74	11 4007	11 4007	33 0820	25 3140	37 4865	31	21	56	0		
18	17 65	11 3960	11 3960	33 0830	25 3206	37 4836	38	55	51	0		
19	18 72	11 3779	11 3779	33 0841	25 3302	37 4686	73	41	37	0		
20	19 67	11 3537	11 3537	33 0889	25 3414	37 4519	74	43	40	1		
21	20 69	11 3414	11 3414	33 0908	25 3472	37 4430	77	40	36	0		
22	21 75	11 3317	11 3317	33 0927	25 3586	37 4365	79	40	33	0		
23	22 72	11 3140	11 3140	33 0951	25 3671	37 4233	52	58	31	0		
24	23 67	11 3003	11 3003	33 0977	25 3751	37 4140	64	57	47	0		
25	24 69	11 2859	11 2859	33 1002	25 3884	37 4037	35	37	33	0		
26	25 70	11 2737	11 2737	33 1023	25 3935	37 3951	1 00	30	29	0		
27	26 72	11 2668	11 2668	33 1043	25 4004	37 3915	35	37	33	0		
28	27 65	11 2623	11 2623	33 1055	25 4126	37 3889	58	52	44	0		
29	28 65	11 2606	11 2606	33 1067	25 4087	37 3788	53	51	42	0		
30	29 71	11 2550	11 2550	33 0909	25 4099	37 3683	88	35	32	1		
31	30 72	11 2450	11 2450	33 1090	25 4289	37 3740	1 00	30	29	0		
32	31 74	11 2468	11 2468	33 1096	25 4325	37 3806	88	36	33	1		
33	32 76	11 2459	11 2459	33 1095	25 4381	37 3801	58	52	42	2		
34	33 63	11 2436	11 2436	33 1101	25 4447	37 3790	57	55	30	0		
35	34 70	11 2426	11 2426	33 1104	25 4578	37 3789	85	37	35	0		
36	35 73	11 2430	11 2430	33 1104	25 4569	37 3797	94	32	32	0		
37	36 74	11 2427	11 2427	33 0963	25 4464	37 3654	79	39	36	0		
38	37 70	11 2413	11 2413	33 0962	25 4514	37 3651	77	41	36	0		
39	38 68	11 2412	11 2412	33 0805	25 4485	37 3489	81	38	33	0		
40	39 69	11 2411	11 2411	33 0827	25 4473	37 3515	77	40	36	0		
41	40 73	11 2411	11 2411	33 1112	25 4829	37 3809	50	62	51	0		
42	41 69	11 2411	11 2411	33 1112	25 4812	37 3813	73	42	39	0		
43	42 71	11 2414	11 2414	33 1113	25 4870	37 3821	1 09	29	29	0		
44	43 74	11 2420	11 2420	33 1109	25 4940	37 3827	1 19	26	25	1		
45	44 73	11 2430	11 2430	33 1106	25 5017	37 3837	46	36	34	1		
46	45 75	11 2423	11 2423	33 1033	25 4962	37 3750	40	77	66	0		
47	46 66	11 2433	11 2433	33 1109	25 5137	37 3851	72	45	41	0		
48	47 72	11 2429	11 2429	33 1110	25 5073	37 3853	1 16	26	26	0		
49	48 73	11 2436	11 2436	33 1109	25 5203	37 3867	1 23	25	24	0		
50	49 74	11 2440	11 2440	33 1109	25 5292	37 3871	93	35	27	1		
51	50 76	11 2430	11 2430	33 1114	25 5280	37 3870	42	73	55	0		
52	51 66	11 2418	11 2418	33 1124	25 5415	37 3874	46	69	53	0		
53	52 70	11 2433	11 2433	33 1128	25 5405	37 3896	70	44	40	0		
54	53 69	11 2433	11 2433	33 1127	25 5432	37 3900	81	38	36	0		
55	54 71	11 2432	11 2432	33 1124	25 5437	37 3900	46	36	34	0		
56	55 79	11 2419	11 2419	33 1124	25 5552	37 3892	24	126	64	0		
57	56 64	11 2427	11 2427	33 1126	25 5556	37 3905	74	43	33	0		
58	57 68	11 2443	11 2443	33 0947	25 5561	37 3743	1 14	27	25	0		
59	58 72	11 2443	11 2443	33 1144	25 5667	37 3947	1 13	28	27	0		
60	59 81	11 2426	11 2426	33 1052	25 5736	37 3843	53	56	54	0		
61	60 61	11 2426	11 2426	33 1143	25 5812	37 3939	30	106	68	0		
62	61 71	11 2426	11 2426	33 1129	25 5768	37 3929	20	35	32	0		
63	62 76	11 2428	11 2428	33 1137	25 5741	37 3944	26	34	33	0		
64	63 75	11 2434	11 2434	33 1141	25 5954	37 3958	75	36	36	0		
65	64 77	11 2429	11 2429	33 1126	25 5994	37 3947	33	95	71	0		
66	65 65	11 2423	11 2423	33 1126	25 6047	37 3940	47	66	50	0		
67	66 67	11 2425	11 2425	33 1121	25 6089	37 3941	90	35	32	0		
68	67 72	11 2428	11 2428	33 1123	25 6112	37 3950	1 00	30	29	0		
69	68 73	11 2423	11 2423	33 1123	25 6206	37 3950	72	43	34	0		
70	69 69	11 2427	11 2427	33 1130	25 6392	37 3964	24	129	67	1		
71	70 70	11 2432	11 2432	33 1129	25 6255	37 3972	49	64	52	0		
72	71 73	11 2431	11 2431	33 1130	25 6345	37 3977	45	69	59	0		
73	72 71	11 2441	11 2441	33 1141	25 6380	37 4001	34	40	38	0		
74	73 70	11 2435	11 2435	33 1024	25 6345	37 3937	24	128	63	0		
75	74 72	11 2446	11 2446	33 1136	25 6419	37 4010	49	65	56	0		
76	75 68	11 2448	11 2448	33 1137	25 6473	37 4016	19	159	65	0		
77	76 71	11 2468	11 2468	33 1153	25 6578	37 4054	29	39	35	0		
78	77 77	11 2472	11 2472	33 1062	25 6574	37 3971	16	190	55	0		
79	78 76	11 2478	11 2478	33 0824	25 6540	37 3748	56	55	45	1		

MAXIMUM DEPTH OF CAST = 79.20M

RTN NO	DRAR	FAST-T DEG-C	REGR-T DEG-C	SAT OPT	STORM-T DEG-C	COND MAX	VEL M/S	TIME	NO	WIND	WIND	WIND
1	1	133	133	33	24	39	30	100	100	100	100	100
2	1	133	133	33	24	39	30	100	100	100	100	100
3	1	133	133	33	24	39	30	100	100	100	100	100
4	1	133	133	33	24	39	30	100	100	100	100	100
5	1	133	133	33	24	39	30	100	100	100	100	100
6	1	133	133	33	24	39	30	100	100	100	100	100
7	1	133	133	33	24	39	30	100	100	100	100	100
8	1	133	133	33	24	39	30	100	100	100	100	100
9	1	133	133	33	24	39	30	100	100	100	100	100
10	1	133	133	33	24	39	30	100	100	100	100	100
11	1	133	133	33	24	39	30	100	100	100	100	100
12	1	133	133	33	24	39	30	100	100	100	100	100
13	1	133	133	33	24	39	30	100	100	100	100	100
14	1	133	133	33	24	39	30	100	100	100	100	100
15	1	133	133	33	24	39	30	100	100	100	100	100
16	1	133	133	33	24	39	30	100	100	100	100	100
17	1	133	133	33	24	39	30	100	100	100	100	100
18	1	133	133	33	24	39	30	100	100	100	100	100
19	1	133	133	33	24	39	30	100	100	100	100	100
20	1	133	133	33	24	39	30	100	100	100	100	100
21	1	133	133	33	24	39	30	100	100	100	100	100
22	1	133	133	33	24	39	30	100	100	100	100	100
23	1	133	133	33	24	39	30	100	100	100	100	100
24	1	133	133	33	24	39	30	100	100	100	100	100
25	1	133	133	33	24	39	30	100	100	100	100	100
26	1	133	133	33	24	39	30	100	100	100	100	100
27	1	133	133	33	24	39	30	100	100	100	100	100
28	1	133	133	33	24	39	30	100	100	100	100	100
29	1	133	133	33	24	39	30	100	100	100	100	100
30	1	133	133	33	24	39	30	100	100	100	100	100
31	1	133	133	33	24	39	30	100	100	100	100	100
32	1	133	133	33	24	39	30	100	100	100	100	100
33	1	133	133	33	24	39	30	100	100	100	100	100
34	1	133	133	33	24	39	30	100	100	100	100	100
35	1	133	133	33	24	39	30	100	100	100	100	100
36	1	133	133	33	24	39	30	100	100	100	100	100
37	1	133	133	33	24	39	30	100	100	100	100	100
38	1	133	133	33	24	39	30	100	100	100	100	100
39	1	133	133	33	24	39	30	100	100	100	100	100
40												

maximum depth of leaf = 500 cm

DEPTH BIN AVERAGED CTD DATA

START TIME 193/0348Z POSITION 40 54 96N 69 14 01W											
STA NO 7 LOW NO 7 INST NO 3 TAPE NO 1											
BIN SIZE = 1 0M DEPTHS TOP = 0 0M, BOTTOM = 100 0M SURFACE PRES = 1 00DBAR											
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	BIN WILD	
1	46	11 2205	11 2205	32 0740	24 4844	36 2930	*****	10	10	0	
2	47	11 2205	11 2205	32 0782	24 4926	36 2977	*****	9	9	0	
3	48	11 1947	11 1947	32 1095	24 3250	36 3070	*****	9	9	0	
4	49	11 1856	11 1856	32 1316	24 5510	36 3219	*****	9	9	0	
5	50	11 1830	11 1830	32 1484	24 5686	36 3371	*****	9	9	0	
6	55	11 1819	11 1819	32 1564	24 5815	36 3446	*****	9	9	0	
7	56	11 1580	11 1580	32 2065	24 6278	36 3747	*****	9	9	0	
8	57	11 1583	11 1583	32 2005	24 7074	36 4707	*****	9	9	0	
9	58	11 2048	11 2048	32 2895	24 7729	36 6030	*****	9	9	0	
10	59	11 2462	11 2462	32 4638	24 8266	36 7158	*****	9	9	0	
11	54	11 2448	11 2448	32 4924	24 8566	36 7440	*****	8	8	0	
12	55	11 1779	11 1779	32 5329	24 9036	36 7254	*****	9	9	0	
13	56	11 1476	11 1476	32 5385	24 9191	36 7044	*****	9	9	0	
14	57	11 1538	11 1538	32 5904	24 9599	36 7630	*****	9	9	0	
15	59	11 1563	11 1563	32 6211	24 9845	36 7968	*****	9	9	0	
16	56	11 1291	11 1291	32 6454	25 0169	36 7974	*****	8	8	0	
17	57	11 1320	11 1320	32 7100	25 0737	36 8657	*****	9	9	0	
18	58	11 1330	11 1330	32 7531	25 1133	36 9107	*****	9	9	0	
19	59	11 1407	11 1407	32 7663	25 1262	36 9313	*****	9	9	0	
20	58	11 1719	11 1719	32 8320	25 1722	37 0265	*****	9	9	0	
21	54	11 2557	11 2557	32 9150	25 2278	37 1868	*****	8	8	0	
22	55	11 2971	11 2971	32 9281	25 2534	37 2380	*****	9	9	0	
23	56	11 3183	11 3183	32 9314	25 2632	37 2610	*****	9	9	0	
24	57	11 3200	11 3200	32 9493	25 2550	37 2811	*****	9	9	0	
25	57	11 3200	11 3200	32 9546	25 2646	37 2870	*****	9	9	0	
26	55	11 3200	11 3200	32 9542	25 2762	37 2870	*****	8	8	0	
27	56	11 3118	11 3118	32 9811	25 2895	37 2870	*****	9	9	0	
28	57	11 3146	11 3146	32 9873	25 2873	37 2870	*****	9	9	0	
29	58	11 2955	11 2955	32 9808	25 3021	37 2930	*****	9	9	0	
30	58	11 2983	11 2983	32 0165	25 3499	37 3322	*****	9	9	0	
31	55	11 3075	11 3075	32 0155	25 3519	37 3400	*****	8	8	0	
32	56	11 3017	11 3017	32 0204	25 3687	37 3400	*****	9	9	0	
33	57	11 2995	11 2995	32 0219	25 3654	37 3400	*****	9	9	0	
34	58	11 3040	11 3040	32 0275	25 3618	37 3502	*****	9	9	0	
35	57	11 2903	11 2903	32 0243	25 4069	37 3857	*****	9	9	0	
36	59	11 2705	11 2705	32 0989	25 4407	37 3930	*****	9	9	0	
37	56	11 2705	11 2705	32 0985	25 4384	37 3930	*****	8	8	0	
38	57	11 2705	11 2705	32 0981	25 4413	37 3930	*****	9	9	0	
39	58	11 2705	11 2705	32 0976	25 4570	37 3930	*****	9	9	0	
40	57	11 2705	11 2705	32 0972	25 4492	37 3930	*****	9	9	0	
41	54	11 2705	11 2705	32 0968	25 4609	37 3930	*****	8	8	0	
42	55	11 2705	11 2705	32 0964	25 4842	37 3930	*****	9	9	0	
43	56	11 2705	11 2705	32 0960	25 4594	37 3930	*****	9	9	0	
44	57	11 2713	11 2713	32 0948	25 4713	37 3930	*****	9	9	0	
45	56	11 2763	11 2763	32 0899	25 4906	37 3930	*****	9	9	0	
46	53	11 2813	11 2813	32 0850	25 4749	37 3930	*****	8	8	0	
47	54	11 2635	11 2635	32 1005	25 4980	37 3930	*****	9	9	0	
48	55	11 2337	11 2337	32 1270	25 5158	37 3930	*****	9	9	0	
49	56	11 1955	11 1955	32 1609	25 5633	37 3930	*****	9	9	0	
50	56	11 1291	11 1291	32 2075	25 6242	37 3799	*****	9	9	0	
51	58	11 1268	11 1268	32 1964	25 6059	37 3670	*****	9	9	0	
52	59	11 1060	11 1060	32 2142	25 6536	37 3670	*****	8	8	0	
53	53	11 1150	11 1150	32 2017	25 6281	37 3670	*****	9	9	0	
54	55	11 0849	11 0849	32 2036	25 6253	37 3583	*****	9	9	0	
55	57	11 0858	11 0858	32 2243	25 6637	37 3596	*****	9	9	0	
56	59	11 0830	11 0830	32 2057	25 6530	37 3487	*****	9	9	0	
57	56	11 0830	11 0830	32 2032	25 6414	37 3365	*****	8	8	0	
58	57	11 0830	11 0830	32 2006	25 6504	37 3343	*****	9	9	0	
59	58	11 0830	11 0830	32 1979	25 6551	37 3320	*****	9	9	0	
60	57	11 0830	11 0830	32 1951	25 6789	37 3297	*****	9	9	0	
61	60	11 0830	11 0830	32 1925	25 6562	37 3275	*****	9	9	0	
62	56	11 0830	11 0830	32 1916	25 6822	37 3270	*****	8	8	0	

MAXIMUM DEPTH OF CAST = 62 02M



DEPTH BIN AVERAGED STD DATA

START TIME 193/2212Z POSITION 40 44 50N 69 13 32W STA NO 7 LOW NO 8 INST NO TAPE NO 1 BIN SIZE = 1 0M DEPTHS TOP = 0 0M BOTTOM = 100 0M SURFACE PRES = 1 00BAR											
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO. POINTS/BIN			
								TOTAL	USED	WILD	
1	46	15 6635	15 6635	31 8613	33 2815	39 8310	*****	10	10	0	
2	41	15 3378	15 3378	31 9257	33 5604	39 8310	*****	11	2	0	
3	35	15 8619	15 8619	33 8794	34 8117	38 6067	*****	9	9	0	
4	30	15 6885	15 6885	33 7227	34 7377	38 2839	*****	9	9	0	
5	25	15 5007	15 5007	32 7696	34 4069	38 1620	*****	9	9	0	
6	5	12 6126	12 6126	32 8036	34 8167	38 2999	*****	9	9	0	
7	6	12 2951	12 2951	32 7616	34 8503	37 9672	*****	9	9	0	
8	7	12 3158	12 3158	32 8767	34 9402	38 1061	*****	9	9	0	
9	8	12 2583	12 2583	32 9240	34 9919	38 1032	*****	9	9	0	
10	9	12 0725	12 0725	33 0035	35 0908	38 0181	*****	9	9	0	
11	10	11 8671	11 8671	33 0463	35 1647	37 8729	*****	9	9	0	
12	11	11 7567	11 7567	33 0716	35 2182	37 7984	*****	9	9	0	
13	12	11 6114	11 6114	33 0548	35 2297	37 6490	*****	9	9	0	
14	13	11 5717	11 5717	33 0731	35 2583	37 6320	*****	9	9	0	
15	14	11 4922	11 4922	33 0801	35 3410	37 5670	*****	9	9	0	
16	15	11 4474	11 4474	33 0808	35 3975	37 5273	*****	9	9	0	
17	16	11 4468	11 4468	33 0865	35 4062	37 5330	*****	9	9	0	
18	17	11 5426	11 5426	33 1638	35 3597	37 6996	*****	9	9	0	
19	18	11 5341	11 5341	33 1539	35 3579	37 6822	*****	9	9	0	
20	19	11 4762	11 4762	33 1247	35 3479	37 6000	*****	9	9	0	
21	20	11 4767	11 4767	33 1283	35 3491	37 6045	*****	9	9	0	
22	21	11 4631	11 4631	33 1364	35 3680	37 6007	*****	9	9	0	
23	22	11 5200	11 5200	33 2030	35 4149	37 7210	*****	9	9	0	
24	23	11 4105	11 4105	33 1837	35 4213	37 6817	*****	9	9	0	
25	24	11 2887	11 2887	33 1681	35 4361	37 4750	*****	9	9	0	
26	25	11 2538	11 2538	33 1741	35 4489	37 4496	*****	8	8	0	
27	26	11 2355	11 2355	33 1782	35 4636	37 4376	*****	9	9	0	
28	27	11 2602	11 2602	33 2158	35 4971	37 4987	*****	9	9	0	
29	28	11 2844	11 2844	33 2452	35 5227	37 5509	*****	9	9	0	
30	29	11 2856	11 2856	33 2442	35 5246	37 5514	*****	9	9	0	
31	30	11 2331	11 2331	33 2578	35 5492	37 5174	*****	8	8	0	
32	31	11 2066	11 2066	33 2437	35 5472	37 4796	*****	9	9	0	
33	32	11 1799	11 1799	33 2595	35 5620	37 4716	*****	9	9	0	
34	33	11 1612	11 1612	33 2671	35 5827	37 4626	*****	9	9	0	
35	34	11 1580	11 1580	33 2660	35 5798	37 4590	*****	9	9	0	
36	35	11 1537	11 1537	33 2659	35 6027	37 4553	*****	9	9	0	
37	36	11 1365	11 1365	33 2747	35 5984	37 4420	*****	9	9	0	
38	37	11 1233	11 1233	33 2803	35 6193	37 4430	*****	9	9	0	
39	38	11 1094	11 1094	33 2865	35 6426	37 4370	*****	9	9	0	
40	39	11 0937	11 0937	33 2867	35 6362	37 4232	*****	9	9	0	
41	40	11 0830	11 0830	33 2857	35 6410	37 4129	*****	8	8	0	
42	41	11 0830	11 0830	33 2793	35 6326	37 4069	*****	9	9	0	
43	42	11 0830	11 0830	33 2780	35 6261	37 4060	*****	9	9	0	
44	43	11 0830	11 0830	33 2776	35 6483	37 4060	*****	9	9	0	
45	44	11 0830	11 0830	33 2772	35 6586	37 4060	*****	9	9	0	
46	45	11 0830	11 0830	33 2873	35 6637	37 4166	*****	8	8	0	
47	46	11 0830	11 0830	33 3031	35 6894	37 4330	*****	9	9	0	
48	47	11 0823	11 0823	33 3033	35 6974	37 4330	*****	9	9	0	
49	48	11 0705	11 0705	33 3136	35 7065	37 4330	*****	9	9	0	
50	49	11 0705	11 0705	33 3132	35 7091	37 4330	*****	9	9	0	
51	50	11 0705	11 0705	33 3127	35 7097	37 4330	*****	9	9	0	

MAXIMUM DEPTH OF CAST = 51.0M

DEPTH BIN AVERAGED CTD DATA

START TIME 193.22577 POSITION 40 44 71N 59 5 17W STA NO 710W NO 91 INST NO 2 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M, BOTTOM = 100.0M SURFACE PRES = 1.00BAR											
RIN NO	DRAG M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/ USED	BIN WILD	
1	46	16 0500	16 0500	33 3580	24 4190	41 9910	*****	10	10	0	
2	50	16 0417	16 0417	33 3571	24 4254	41 9826	*****	9	9	0	
3	55	15 9142	15 9142	33 0881	24 3296	41 6721	*****	9	9	0	
4	55	15 1778	15 1778	33 0467	24 4465	40 9340	*****	9	9	1	
5	58	14 8493	14 8493	33 1386	24 6120	40 7282	*****	9	9	0	
6	55	14 6365	14 6365	33 1503	24 6722	40 5424	*****	8	8	0	
7	55	14 3514	14 3514	33 1128	24 7064	40 3356	*****	9	9	0	
8	55	13 9783	13 9783	33 0713	24 7913	39 5880	*****	9	9	0	
9	56	13 5809	13 5809	33 0430	24 8246	39 5069	*****	9	9	0	
10	58	12 2362	12 2362	33 1599	25 1826	38 3279	*****	9	9	0	
11	54	11 8424	11 8424	33 3019	25 3715	38 1128	*****	8	8	0	
12	51	11 5932	11 5932	33 3566	25 4476	38 0320	*****	9	9	0	
13	55	11 3964	11 3964	33 3698	25 5175	37 7731	*****	9	9	0	
14	57	11 2302	11 2302	33 4152	25 5854	37 6669	*****	9	9	0	
15	59	11 1386	11 1386	33 4180	25 6136	37 5861	*****	9	9	0	
16	56	11 1179	11 1179	33 4293	25 6244	37 5790	*****	8	8	0	
17	52	11 1112	11 1112	33 4351	25 6393	37 5790	*****	9	9	0	
18	54	11 1149	11 1149	33 4704	25 6297	37 5681	*****	9	9	0	
19	56	11 1050	11 1050	33 4260	25 6348	37 5650	*****	9	9	0	
20	58	11 1000	11 1000	33 4301	25 6527	37 5650	*****	9	9	0	
21	54	11 0959	11 0959	33 4334	25 6647	37 5650	*****	8	8	0	
22	51	11 0955	11 0955	33 4333	25 6621	37 5650	*****	9	9	0	
23	55	11 0955	11 0955	33 4329	25 6675	37 5650	*****	9	9	0	
24	55	11 0955	11 0955	33 4330	25 6755	37 5656	*****	9	9	0	
25	57	11 0942	11 0942	33 4338	25 6878	37 5757	*****	9	9	0	
26	55	11 0833	11 0833	33 4567	25 7146	37 5790	*****	8	8	0	
27	55	11 0830	11 0830	33 4565	25 7109	37 5790	*****	9	9	0	
28	54	11 0830	11 0830	33 4561	25 7197	37 5790	*****	9	9	0	
29	56	11 0830	11 0830	33 4556	25 7254	37 5790	*****	9	9	0	
30	58	11 0830	11 0830	33 4552	25 7369	37 5790	*****	9	9	0	
31	55	11 0830	11 0830	33 4548	25 7261	37 5790	*****	8	8	0	
32	52	11 0830	11 0830	33 4544	25 7254	37 5790	*****	9	9	0	
33	54	11 0830	11 0830	33 4539	25 7395	37 5790	*****	9	9	0	
34	55	11 0830	11 0830	33 4535	25 7450	37 5790	*****	9	9	0	
35	57	11 0830	11 0830	33 4531	25 7325	37 5790	*****	9	9	0	
36	55	11 0830	11 0830	33 4526	25 7455	37 5790	*****	9	9	0	
37	56	11 0830	11 0830	33 4522	25 7406	37 5790	*****	9	9	0	
38	55	11 0830	11 0830	33 4518	25 7632	37 5790	*****	9	9	0	
39	55	11 0830	11 0830	33 4514	25 7613	37 5790	*****	9	9	0	
40	57	11 0830	11 0830	33 4509	25 7899	37 5790	*****	9	9	0	
41	54	11 0826	11 0826	33 4509	25 7681	37 5790	*****	8	8	0	
42	50	11 0708	11 0708	33 4612	25 7912	37 5790	*****	9	9	0	
43	53	11 0705	11 0705	33 4611	25 7966	37 5790	*****	9	9	0	
44	54	11 0705	11 0705	33 4606	25 7950	37 5790	*****	9	9	0	
45	56	11 0705	11 0705	33 4602	25 8009	37 5790	*****	9	9	0	
46	53	11 0705	11 0705	33 4598	25 8245	37 5790	*****	8	8	0	
47	50	11 0705	11 0705	33 4594	25 8053	37 5790	*****	9	9	0	
48	52	11 0705	11 0705	33 4589	25 7978	37 5790	*****	9	9	0	
49	54	11 0705	11 0705	33 4585	25 8045	37 5790	*****	9	9	0	
50	56	11 0705	11 0705	33 4581	25 8485	37 5790	*****	9	9	0	
51	58	11 0705	11 0705	33 4576	25 8090	37 5790	*****	9	9	0	
52	55	11 0705	11 0705	33 4572	25 8362	37 5790	*****	9	9	0	
53	53	11 0705	11 0705	33 4568	25 8263	37 5790	*****	9	9	0	
54	55	11 0705	11 0705	33 4564	25 8322	37 5790	*****	9	9	0	
55	57	11 0664	11 0664	33 4597	25 8615	37 5790	*****	9	9	0	
56	55	11 0455	11 0455	33 4783	25 8746	37 5790	*****	9	9	0	
57	56	11 0455	11 0455	33 4779	25 8658	37 5790	*****	9	9	0	
58	55	11 0455	11 0455	33 4775	25 8935	37 5790	*****	9	9	0	
59	55	11 0362	11 0362	33 4855	25 9434	37 5790	*****	9	9	0	
60	57	11 0367	11 0367	33 4847	25 9163	37 5790	*****	9	9	0	
61	59	11 0401	11 0401	33 4811	25 8825	37 5790	*****	9	9	0	
62	54	11 0434	11 0434	33 4776	25 9150	37 5790	*****	9	9	0	
63	53	11 0386	11 0386	33 4817	25 9176	37 5790	*****	9	9	0	
64	53	11 0330	11 0330	33 4863	25 9178	37 5790	*****	9	9	0	
65	57	11 0330	11 0330	33 4859	25 9384	37 5790	*****	9	9	0	
66	58	11 0219	11 0219	33 4955	25 9321	37 5790	*****	9	9	0	
67	55	11 0111	11 0111	33 5058	25 9479	37 5790	*****	9	9	0	
68	55	11 0154	11 0154	33 5002	25 9498	37 5790	*****	9	9	0	
69	54	11 0175	11 0175	33 4982	25 9636	37 5790	*****	9	9	0	

MAXIMUM DEPTH OF CASE = 69.05M

DEPTH BIN AVERAGED CTD DATA

START TIME = 193/23397 POSITION 40 44 90N 58 58 15W BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.00DEHR											
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WILD	
1	46	15 4620	15 4620	33 3220	24 3741	42 4550	*****	10	10	0	
2	46	15 4620	15 4620	33 3216	24 3788	42 4550	*****	9	9	0	
3	46	15 4573	15 4523	33 3280	24 3909	42 4555	*****	9	9	0	
4	46	15 0404	15 0404	33 3634	24 4406	41 9894	*****	9	9	0	
5	46	15 3977	15 3977	33 3944	24 5028	41 8895	*****	9	9	0	
6	5	15 8130	15 8130	33 3825	24 5176	41 7962	*****	8	8	0	
7	5	15 4075	15 4075	33 3418	24 6559	41 4793	*****	9	9	0	
8	5	14 6704	14 6704	33 3332	24 7372	40 6658	*****	9	9	0	
9	5	14 0388	14 0388	33 3612	24 9739	40 2131	*****	9	9	0	
10	5	13 3073	13 3073	33 4301	25 1823	39 6036	*****	9	9	0	
11	10	12 5636	12 5636	33 4668	25 3624	38 9499	*****	8	8	0	
12	10	12 2534	12 2534	33 5774	25 5121	38 7771	*****	9	9	0	
13	10	11 7757	11 7757	33 6484	25 6602	38 4070	*****	9	9	0	
14	10	11 4870	11 4870	33 5770	25 6653	38 0473	*****	9	9	0	
15	10	11 3969	11 3969	33 5729	25 6846	37 9804	*****	9	9	0	
16	15	11 3389	11 3389	33 5619	25 6930	37 9163	*****	8	8	0	
17	15	11 3036	11 3036	33 5552	25 7033	37 8873	*****	9	9	0	
18	15	11 2523	11 2523	33 5483	25 7000	37 8636	*****	9	9	0	
19	15	11 2205	11 2205	33 5337	25 7107	37 8403	*****	9	9	0	
20	15	11 2205	11 2205	33 5565	25 7240	37 8033	*****	9	9	0	
21	20	11 2142	11 2142	33 5451	25 7289	37 7869	*****	8	8	0	
22	20	11 1902	11 1902	33 5437	25 7389	37 7638	*****	9	9	0	
23	20	11 1720	11 1720	33 5495	25 7506	37 7533	*****	9	9	0	
24	20	11 1513	11 1513	33 5578	25 7637	37 7431	*****	9	9	0	
25	25	11 1361	11 1361	33 5471	25 7602	37 7188	*****	8	8	0	
26	25	11 1103	11 1103	33 5446	25 7651	37 6929	*****	9	9	0	
27	25	11 1080	11 1080	33 5385	25 7735	37 6850	*****	9	9	0	
28	25	11 1080	11 1080	33 5384	25 7778	37 6853	*****	9	9	0	
29	25	11 1103	11 1103	33 5575	25 8057	37 7072	*****	9	9	0	
30	30	11 1229	11 1229	33 5640	25 8055	37 7257	*****	8	8	0	
31	30	11 1412	11 1412	33 5691	25 8011	37 7481	*****	9	9	0	
32	30	11 1484	11 1484	33 5880	25 8325	37 7743	*****	9	9	0	
33	30	11 1631	11 1631	33 5800	25 8209	37 7801	*****	9	9	0	
34	30	11 1673	11 1673	33 5874	25 8314	37 7920	*****	9	9	0	
35	35	11 1629	11 1629	33 5943	25 8388	37 7953	*****	9	9	0	
36	35	11 1591	11 1591	33 6006	25 8533	37 7985	*****	9	9	0	
37	35	11 1613	11 1613	33 6013	25 8624	37 8017	*****	9	9	0	
38	35	11 1654	11 1654	33 5993	25 8600	37 8040	*****	9	9	0	
39	35	11 1697	11 1697	33 5950	25 8645	37 8040	*****	9	9	0	
40	40	11 1754	11 1754	33 6023	25 8800	37 8170	*****	8	8	0	
41	40	11 1813	11 1813	33 5965	25 8669	37 8170	*****	9	9	0	
42	40	11 1794	11 1794	33 5978	25 9052	37 8170	*****	9	9	0	
43	40	11 1749	11 1749	33 6014	25 9039	37 8170	*****	9	9	0	
44	40	11 1722	11 1722	33 6035	25 9021	37 8170	*****	9	9	0	
45	45	11 1807	11 1807	33 5965	25 9053	37 8182	*****	8	8	0	
46	45	11 1911	11 1911	33 5972	25 8875	37 8289	*****	9	9	0	
47	45	11 1955	11 1955	33 6077	25 9107	37 8440	*****	9	9	0	
48	45	11 1955	11 1955	33 6073	25 9149	37 8440	*****	9	9	0	
49	45	11 1965	11 1965	33 6059	25 9208	37 8440	*****	9	9	0	
50	50	11 2027	11 2027	33 5998	25 9062	37 8440	*****	9	9	0	
51	50	11 2077	11 2077	33 5948	25 9053	37 8440	*****	9	9	0	
52	50	11 2069	11 2069	33 5987	25 9017	37 8477	*****	9	9	0	
53	50	11 2032	11 2032	33 6080	25 9340	37 8547	*****	9	9	0	
54	50	11 2003	11 2003	33 6132	25 9320	37 8570	*****	9	9	0	
55	55	11 1971	11 1971	33 6150	25 9481	37 8571	*****	9	9	0	
56	55	11 1974	11 1974	33 6140	25 9491	37 8610	*****	9	9	0	
57	55	11 2016	11 2016	33 6197	25 9551	37 8661	*****	9	9	0	
58	55	11 2059	11 2059	33 6210	25 9541	37 8718	*****	9	9	0	
59	55	11 2103	11 2103	33 6224	25 9721	37 8778	*****	9	9	0	
60	60	11 2147	11 2147	33 6229	25 9773	37 8827	*****	9	9	0	
61	60	11 2189	11 2189	33 6190	25 9838	37 8830	*****	9	9	0	

MAXIMUM DEPTH OF CAST = 62.0M

DEPTH BIN AVERAGED CTD DATA

START TIME 194/00177 POSITION 40 40 23N SR 59 52W STA NO 7 LOW NO 11 INST 2 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.00BAR											
RIN NO	DRAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	RIN WILD	
1	46	18 4590	18 4590	33 1941	23 7993	44 2170	*****	10	10	0	
2	1 46	18 4451	18 4451	33 2012	23 8136	44 2126	*****	9	9	0	
3	2 46	18 3777	18 3777	33 1661	23 8084	44 1964	*****	9	9	0	
4	3 46	18 2140	18 2140	33 1379	23 8321	43 9163	*****	9	9	0	
5	4 46	17 9367	17 9367	32 9905	23 7913	43 4778	*****	9	9	0	
6	5 55	17 1579	17 1579	32 7477	23 7976	42 4564	*****	8	8	0	
7	6 55	16 3447	16 3447	32 6973	23 7532	41 5346	*****	9	9	0	
8	7 55	15 8047	15 8047	32 8685	24 2107	41 3339	*****	9	9	0	
9	8 55	15 5593	15 5593	32 8728	24 2215	41 0996	*****	9	9	0	
10	9 58	15 2339	15 2339	32 8789	24 3523	40 3028	*****	9	9	0	
11	10 54	14 8084	14 8084	32 8164	24 4039	40 3380	*****	9	9	0	
12	11 51	14 2697	14 2697	32 9206	24 6040	39 9525	*****	9	9	0	
13	12 55	13 9567	13 9567	33 2568	24 9313	40 0254	*****	9	9	0	
14	13 52	14 2634	14 2634	33 8749	25 3467	40 9825	*****	9	9	0	
15	14 39	14 2526	14 2526	33 5199	25 0848	40 5886	*****	9	9	0	
16	15 56	13 7484	13 7484	33 6095	25 2574	40 2105	*****	9	9	0	
17	16 52	13 3988	13 3988	33 6601	25 3767	39 9363	*****	9	9	0	
18	17 54	13 0983	13 0983	33 6168	25 4232	39 5184	*****	9	9	0	
19	18 58	12 6771	12 6771	33 7156	25 5601	39 3084	*****	9	9	0	
20	19 58	12 2708	12 2708	33 6108	25 5764	38 8316	*****	9	9	0	
21	20 54	11 7687	11 7687	33 6642	25 7167	38 4201	*****	8	8	0	
22	21 51	11 5741	11 5741	33 2071	25 7915	38 2838	*****	9	9	0	
23	22 53	11 5338	11 5338	33 2087	25 8000	38 3485	*****	9	9	0	
24	23 55	11 5033	11 5033	33 2194	25 8176	38 2314	*****	9	9	0	
25	24 57	11 4546	11 4546	33 7171	25 8439	38 1844	*****	9	9	0	
26	25 55	11 4393	11 4393	33 7214	25 8428	38 1750	*****	8	8	0	
27	26 52	11 4238	11 4238	33 7132	25 8396	38 1528	*****	9	9	0	
28	27 54	11 4014	11 4014	33 7152	25 8560	38 1350	*****	9	9	0	
29	28 56	11 3771	11 3771	33 7375	25 8904	38 1350	*****	9	9	0	
30	29 58	11 3700	11 3700	33 7435	25 8886	38 1350	*****	9	9	0	
31	30 55	11 3387	11 3387	33 3793	25 6303	37 2325	*****	308	9	1	
32	31 52	11 3017	11 3017	33 3204	25 3687	37 3400	*****	9	9	0	
33	32 54	11 2995	11 2995	33 0219	25 3654	37 3400	*****	9	9	0	
34	33 53	11 3040	11 3040	33 0275	25 3618	37 3502	*****	9	9	0	
35	34 57	11 2903	11 2903	33 0743	25 4069	37 3857	*****	9	9	0	
36	35 59	11 2705	11 2705	33 0989	25 4407	37 3930	*****	9	9	0	
37	36 56	11 2705	11 2705	33 0985	25 4384	37 3930	*****	9	9	0	
38	37 56	11 2705	11 2705	33 0981	25 4413	37 3930	*****	9	9	0	
39	38 56	11 2705	11 2705	33 0976	25 4570	37 3930	*****	9	9	0	
40	39 57	11 2705	11 2705	33 0972	25 4492	37 3930	*****	9	9	0	
41	40 54	11 2705	11 2705	33 0968	25 4609	37 3930	*****	8	8	0	
42	41 50	11 2705	11 2705	33 0964	25 4842	37 3930	*****	9	9	0	
43	42 52	11 2705	11 2705	33 0960	25 4596	37 3930	*****	9	9	0	
44	43 54	11 2713	11 2713	33 0948	25 4713	37 3930	*****	9	9	0	
45	44 56	11 2763	11 2763	33 0899	25 4906	37 3930	*****	9	9	0	
46	45 53	11 2813	11 2813	33 0850	25 4749	37 3930	*****	8	8	0	
47	46 50	11 2635	11 2635	33 1006	25 4980	37 3930	*****	9	9	0	
48	47 52	11 2337	11 2337	33 1270	25 5158	37 3930	*****	9	9	0	
49	48 54	11 1955	11 1955	33 1609	25 5633	37 3930	*****	9	9	0	
50	49 56	11 1291	11 1291	33 2075	25 6242	37 3799	*****	9	9	0	
51	50 58	11 1268	11 1268	33 1964	25 6059	37 3670	*****	9	9	0	
52	51 56	11 1060	11 1060	33 2147	25 5546	37 3670	*****	8	8	0	
53	52 53	11 1150	11 1150	33 2017	25 6281	37 3624	*****	9	9	0	
54	53 53	11 1089	11 1089	33 2076	25 6263	37 3583	*****	9	9	0	
55	54 52	11 0858	11 0858	33 2243	25 6637	37 3596	*****	9	9	0	
56	55 59	11 0830	11 0830	33 2057	25 6530	37 3387	*****	9	9	0	
57	56 59	11 0830	11 0830	33 2032	25 6414	37 3365	*****	9	9	0	
58	57 58	11 0830	11 0830	33 2006	25 6504	37 3343	*****	9	9	0	
59	58 57	11 0830	11 0830	33 1979	25 6551	37 3320	*****	9	9	0	
60	59 57	11 0830	11 0830	33 1951	25 6789	37 3297	*****	9	9	0	
61	60 59	11 0830	11 0830	33 1925	25 6562	37 3275	*****	9	9	0	
62	61 56	11 0830	11 0830	33 1916	25 6622	37 3270	*****	8	8	0	

MAXIMUM DEPTH OF CAST = 62.02M

DEPTH BIN AVERAGED CTD DATA

STATION NO. = 114 POSITION 40 50 60N 10 10 20E DATE = 11/01/11 DEPTH TOP = 0.0M BOTTOM = 100.0M SURFACE PRESS = 1.000BAR										
BIN NO	DRAG	FAST-T DEG-C	ADJUST DEG-C	SAL PPT	SIGMA-T G/CMM3	COND MM/CM	VEL M/SEC	NO TOTAL	POLYMER/IN USED	WTD
1	1	16 2500	16 2500	32 9393	24 1297	41 8190	*****	10	10	0
2	1	16 2479	16 2479	32 9380	24 1341	41 8160	*****	9	9	0
3	1	16 2155	16 2155	32 7748	24 0565	41 4138	*****	9	9	0
4	1	16 2196	16 2196	32 8720	24 3223	40 2792	*****	9	9	0
5	1	16 8091	16 8091	32 7205	24 4917	40 5059	*****	9	9	0
6	5	14 4987	14 4987	32 9391	24 5767	40 2375	*****	9	9	0
7	5	14 1713	14 1713	33 0546	24 7010	40 0047	*****	9	9	0
8	5	14 0934	14 0934	33 1001	24 8383	39 5100	*****	9	9	0
9	5	14 1118	14 1118	33 1237	24 9043	39 4726	*****	9	9	0
10	5	14 4003	14 4003	33 1373	24 9382	39 3788	*****	9	9	0
11	10	13 3144	13 3144	33 1639	24 9754	39 3268	*****	9	9	0
12	10	13 2463	13 2463	33 1330	24 0041	39 2522	*****	9	9	0
13	10	13 1369	13 1369	33 1471	24 0439	39 1888	*****	9	9	0
14	10	13 2700	13 2700	33 1293	24 1270	39 8619	*****	9	9	0
15	10	13 0184	13 0184	33 2964	24 3541	39 1208	*****	9	9	0
16	15	11 2003	11 2003	33 3974	24 4935	38 0819	*****	9	9	0
17	15	11 5472	11 5472	33 4426	24 5713	37 9874	*****	9	9	0
18	15	11 3688	11 3688	33 4710	24 6182	37 8709	*****	9	9	0
19	15	11 3327	11 3327	33 4895	24 6535	37 8384	*****	9	9	0
20	15	11 6807	11 6807	33 4915	24 6615	37 7628	*****	9	9	0
21	20	11 1932	11 1932	33 5077	24 9652	37 7298	*****	9	9	0
22	20	11 2672	11 2672	33 5189	24 7140	37 7559	*****	9	9	0
23	20	11 1632	11 1632	33 1371	24 7478	37 7341	*****	9	9	0
24	20	11 1483	11 1483	33 5658	24 7610	37 5480	*****	9	9	0
25	20	11 1212	11 1212	33 5648	24 7465	37 7274	*****	9	9	0
26	25	11 0963	11 0963	33 5758	24 7939	37 7110	*****	9	9	0
27	25	11 0942	11 0942	33 5773	24 7960	37 7110	*****	9	9	0
28	25	11 0949	11 0949	33 5780	24 8146	37 7110	*****	9	9	0
29	25	11 0874	11 0874	33 5823	24 8176	37 7110	*****	9	9	0
30	25	11 0874	11 0874	33 5823	24 8184	37 7110	*****	9	9	0
31	30	11 0853	11 0853	33 5838	24 8263	37 7110	*****	9	9	0
32	30	11 0833	11 0833	33 5851	24 8245	37 7110	*****	9	9	0
33	30	11 0817	11 0817	33 5862	24 8317	37 7110	*****	9	9	0
34	30	11 0796	11 0796	33 5876	24 8417	37 7109	*****	9	9	0
35	30	11 0775	11 0775	33 5824	24 8540	37 7042	*****	9	9	0
36	35	11 0754	11 0754	33 5779	24 8654	37 6981	*****	9	9	0
37	35	11 0734	11 0734	33 5873	24 8635	37 7063	*****	9	9	0
38	35	11 0715	11 0715	33 5843	24 8728	37 7220	*****	9	9	0
39	35	11 0826	11 0826	33 5957	24 8745	37 7240	*****	9	9	0
40	35	11 0830	11 0830	33 5987	24 8877	37 7258	*****	9	9	0
41	40	11 0830	11 0830	33 5972	24 9173	37 7367	*****	9	9	0
42	40	11 0831	11 0831	33 6079	24 9068	37 7380	*****	9	9	0
43	40	11 0849	11 0849	33 6058	24 9002	37 7380	*****	9	9	0
44	40	11 0873	11 0873	33 6032	24 9058	37 7380	*****	9	9	0
45	40	11 0896	11 0896	33 6006	24 9042	37 7380	*****	9	9	0
46	45	11 0920	11 0920	33 5985	24 8924	37 7385	*****	9	9	0
47	45	11 0944	11 0944	33 5912	24 7172	37 7446	*****	9	9	0
48	45	11 1032	11 1032	33 5987	24 7246	37 7499	*****	9	9	0
49	45	11 1080	11 1080	33 5950	24 7215	37 7510	*****	9	9	0
50	45	11 1080	11 1080	33 5984	24 9347	37 7549	*****	9	9	0
51	50	11 1080	11 1080	33 5959	24 9397	37 7639	*****	9	9	0
52	50	11 1080	11 1080	33 5997	24 9495	37 7671	*****	9	9	0
53	50	11 1080	11 1080	33 5914	24 9464	37 7793	*****	9	9	0
54	50	11 1264	11 1264	33 5968	24 9566	37 8122	*****	9	9	0
55	50	11 1212	11 1212	33 5905	24 9523	37 8300	*****	9	9	0
56	55	12 1181	12 1181	34 1288	24 1911	39 2386	*****	9	9	0
57	55	12 1353	12 1353	34 1481	24 1824	39 2250	*****	9	9	0
58	55	12 1398	12 1398	34 1475	24 1786	39 2250	*****	9	9	0
59	55	12 1374	12 1374	34 1495	24 1807	39 2250	*****	9	9	0
60	55	12 1349	12 1349	34 1575	24 1827	39 2657	*****	9	9	0
61	60	12 1504	12 1508	34 1754	24 2515	39 3260	*****	9	9	0
62	60	12 1525	12 1565	34 1779	24 2192	39 3279	*****	9	9	0
63	60	12 1592	12 1592	34 1849	24 2493	39 3217	*****	9	9	0
64	60	12 1815	12 1815	34 1851	24 3265	39 3391	*****	9	9	0
65	60	12 1815	12 1815	34 1851	24 2430	39 3410	*****	9	9	0
66	65	12 1815	12 1815	34 1861	24 2627	39 3410	*****	9	9	0
67	65	12 1815	12 1815	34 1857	24 2435	39 3410	*****	9	9	0
68	65	12 1815	12 1815	34 1853	24 2504	39 3410	*****	9	9	0
69	65	12 1815	12 1815	34 1853	24 2527	39 3410	*****	9	9	0
70	65	12 1815	12 1815	34 1857	24 2528	39 3537	*****	9	9	0
71	70	12 1815	12 1815	34 1874	24 2590	39 3549	*****	9	9	0
72	70	12 1815	12 1815	34 1885	24 2654	39 3668	*****	9	9	0
73	70	12 1815	12 1815	34 1883	24 2692	39 3670	*****	9	9	0
74	70	12 1815	12 1815	34 1879	24 3106	39 3670	*****	9	9	0
75	70	12 1815	12 1815	34 1875	24 3003	39 3670	*****	9	9	0
76	75	12 1815	12 1815	34 1871	24 3022	39 3670	*****	9	9	0
77	75	12 1831	12 1831	34 1852	24 3005	39 3670	*****	9	9	0

MAXIMUM DEPTH OF CAST = 77.0M

DEPTH BIN AVERAGED CTD DATA

START TIME = 194.01397 POSITION = 40 35 12N 27 0 79W STA NO = 710W NO 13 INST NO 1 TYPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
BIN NO	DEBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WILD	
1	46	10 4228	10 4228	33 2125	33 8224	44 2040	*****	10	10	0	
2	46	10 4216	10 4216	33 2126	33 8283	44 2034	*****	9	9	0	
3	46	10 4216	10 4216	33 2010	33 8245	44 1990	*****	9	9	0	
4	46	10 4145	10 4145	33 1971	33 8272	44 1791	*****	9	9	0	
5	46	10 3725	10 3725	33 1971	33 8430	44 1391	*****	9	9	0	
6	55	10 3371	10 3371	33 2003	33 8578	44 1094	*****	8	8	0	
7	55	10 1932	10 1932	33 1854	33 8882	43 9540	*****	9	9	0	
8	55	10 6796	10 6796	33 1234	33 9701	43 3896	*****	9	9	0	
9	56	12 3541	12 3541	33 2362	34 1304	43 1901	*****	9	9	0	
10	56	17 1380	17 1380	33 2349	24 1930	43 0032	*****	9	9	0	
11	54	16 9028	16 9028	33 3909	24 2942	42 8438	*****	8	8	0	
12	54	10 8094	10 8094	33 3291	24 3518	42 7990	*****	9	9	0	
13	55	10 7227	10 7227	33 3676	24 4075	42 7607	*****	9	9	0	
14	55	10 4752	10 4752	33 4376	24 5262	42 6047	*****	9	9	0	
15	56	10 2789	10 2789	33 4165	24 5333	42 5073	*****	9	9	0	
16	56	10 1266	10 1266	33 5483	24 6949	42 3981	*****	8	8	0	
17	56	10 0003	10 0003	33 6350	24 7446	42 3756	*****	9	9	0	
18	56	10 5104	10 5104	33 8407	25 0688	42 1372	*****	9	9	0	
19	56	10 4660	10 4660	33 8359	25 0835	42 0898	*****	9	9	0	
20	56	14 8929	14 8929	33 6653	25 0799	41 3556	*****	9	9	0	
21	54	14 3896	14 3896	33 6591	25 1861	40 8713	*****	8	8	0	
22	54	14 1772	14 1772	33 6502	25 2382	40 8611	*****	9	9	0	
23	54	13 9544	13 9544	33 6567	25 3093	40 8639	*****	9	9	0	
24	54	13 7128	13 7128	33 6991	25 3781	40 2763	*****	9	9	0	
25	57	13 5695	13 5695	33 7177	25 4209	40 1616	*****	9	9	0	
26	55	13 4186	13 4186	33 7747	25 5097	40 0804	*****	8	8	0	
27	55	13 4154	13 4154	34 0048	25 6827	40 3219	*****	9	9	0	
28	56	12 8692	12 8692	34 1013	25 8668	39 9062	*****	9	9	0	
29	56	12 1304	12 1304	34 1392	25 9766	39 1463	*****	9	9	0	
30	56	11 9519	11 9519	34 0043	25 9862	38 9433	*****	9	9	0	
31	55	11 9089	11 9089	33 9858	25 9836	38 8844	*****	8	8	0	
32	55	11 8527	11 8527	33 9723	25 9957	38 8183	*****	9	9	0	
33	54	11 8166	11 8166	33 9837	26 0325	38 7967	*****	9	9	0	
34	55	11 8195	11 8195	33 9868	26 0083	38 8030	*****	9	9	0	
35	57	11 8195	11 8195	33 9738	26 0086	38 7901	*****	9	9	0	
36	59	11 8208	11 8208	33 9750	26 0274	38 7930	*****	9	9	0	
37	56	11 8276	11 8276	33 9732	26 0213	38 7980	*****	9	9	0	
38	56	11 8349	11 8349	33 9714	26 0299	38 8033	*****	9	9	0	
39	55	11 8423	11 8423	33 9877	26 0390	38 8274	*****	9	9	0	
40	57	11 8603	11 8603	34 0041	26 0444	38 8615	*****	9	9	0	
41	54	11 8904	11 8904	34 0332	26 0771	38 9200	*****	8	8	0	
42	50	11 9253	11 9253	34 0475	26 0896	38 9678	*****	9	9	0	
43	50	11 9544	11 9544	34 0485	26 0881	38 9663	*****	9	9	0	
44	54	11 9685	11 9685	34 0595	26 0871	39 0214	*****	9	9	0	
45	56	11 9852	11 9852	34 0642	26 0958	39 0424	*****	9	9	0	
46	53	12 0034	12 0034	34 0828	26 1063	39 0790	*****	8	8	0	
47	50	12 0065	12 0065	34 0893	26 1327	39 0890	*****	9	9	0	
48	50	12 0073	12 0073	34 0961	26 1359	39 0972	*****	9	9	0	
49	54	12 0246	12 0246	34 0989	26 1402	39 1107	*****	9	9	0	
50	56	12 0389	12 0389	34 0996	26 1259	39 1313	*****	9	9	0	
51	58	12 0565	12 0565	34 1089	26 1485	39 1580	*****	9	9	0	
52	56	12 0690	12 0690	34 1191	26 1473	39 1806	*****	9	9	0	
53	53	12 0700	12 0700	34 1351	26 1759	39 1985	*****	9	9	0	
54	51	12 0840	12 0840	34 1308	26 1817	39 2077	*****	9	9	0	
55	57	12 1038	12 1038	34 1252	26 1768	39 2209	*****	9	9	0	

DEPTH BIN AVERAGED CTD DATA

START TIME = 194/0222Z POSITION = 40 34 95N 17 13 95W STA NO = 7100 DEPTHS TOP = 2M BOTTOM = 100.0M SURFACE PRES = 1.00BAR BIN SIZE = 1.0M												
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	STGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	BIN WILD		
1	0.3	16.5840	16.5840	32.2794	24.0845	42.1792	14	225	73	0		
2	1.3	16.7865	16.7865	32.2983	24.0575	42.3932	17	178	66	0		
3	2.3	16.8235	16.8235	32.2711	24.0326	42.3924	21	271	66	0		
4	3.3	16.7773	16.7773	32.2978	24.0460	42.3504	34	293	66	0		
5	4.3	16.6873	16.6873	32.2508	24.0531	42.2531	30	299	66	0		
6	5.3	16.2564	16.2564	32.2243	24.1421	41.8143	49	265	57	0		
7	6.3	16.2743	16.2743	32.2087	24.2205	41.4341	62	260	45	0		
8	7.3	16.8042	16.8042	32.2592	24.2814	41.4254	37	233	66	0		
9	8.3	16.7516	16.7516	32.2622	24.2981	41.3799	43	271	59	0		
10	9.3	16.5896	16.5896	32.2636	24.3403	41.2300	61	252	47	0		
11	10.3	15.5217	15.5217	32.2715	24.3673	41.1757	38	231	60	0		
12	11.3	15.3733	15.3733	32.2496	24.3892	41.1127	43	272	60	0		
13	12.3	15.0923	15.0923	32.2603	24.4611	40.7623	39	246	42	0		
14	13.3	14.7660	14.7660	32.2684	24.5449	40.4573	43	274	53	0		
15	14.3	14.6809	14.6809	32.2951	24.5867	40.4175	57	254	47	0		
16	15.3	14.5737	14.5737	33.2004	24.6180	40.3240	54	256	47	0		
17	16.3	14.4982	14.4982	32.2917	24.6311	40.2445	31	298	24	0		
18	17.3	13.6730	13.6730	32.2977	24.8136	39.4857	36	292	39	0		
19	18.3	13.3098	13.3098	33.2434	24.9290	39.1990	26	322	30	0		
20	19.3	13.0818	13.0818	33.2826	25.0088	39.0304	32	298	39	0		
21	20.3	12.7345	12.7345	33.1278	25.1150	38.7579	57	254	46	0		
22	21.3	12.3620	12.3620	33.2581	25.2981	38.5510	31	339	38	0		
23	22.3	12.3775	12.3775	33.3558	25.3723	38.6672	73	241	39	0		
24	23.3	12.4491	12.4491	33.4110	25.4030	38.7913	44	273	60	0		
25	24.3	12.5042	12.5042	33.4197	25.4076	38.8518	55	255	45	0		
26	25.3	12.5278	12.5278	33.4397	25.4227	38.8949	72	243	41	0		
27	26.3	12.5826	12.5826	33.4959	25.4641	39.0049	67	246	41	0		
28	27.3	12.6173	12.6173	33.5999	25.5373	39.1461	70	245	42	0		
29	28.3	12.4803	12.4803	33.7573	25.6926	39.1826	75	241	36	0		
30	29.3	12.3041	12.3041	33.8541	25.8085	39.1185	65	249	44	0		
31	30.3	11.1770	11.1770	33.8565	25.8336	39.0025	41	274	59	0		
32	31.3	11.9889	11.9889	33.8337	25.8595	38.8036	73	242	38	0		
33	32.3	11.8594	11.8594	33.8225	25.8804	38.6717	66	279	39	0		
34	33.3	11.7768	11.7768	33.8745	25.9423	38.6484	79	233	32	0		
35	34.3	11.7420	11.7420	33.9244	25.9964	38.6673	73	242	38	0		
36	35.3	11.7119	11.7119	33.9420	26.0136	38.6575	40	275	60	0		
37	36.3	11.6807	11.6807	33.9532	26.0394	38.6402	26	247	45	0		
38	37.3	11.6736	11.6736	33.9728	26.0585	38.6541	70	246	43	0		
39	38.3	11.6779	11.6779	33.9850	26.0610	38.6677	66	244	39	0		
40	39.3	11.6817	11.6817	33.9890	26.0697	38.6789	43	255	34	0		
41	40.3	11.6819	11.6819	33.9915	26.0811	38.6822	94	231	29	0		
42	41.3	11.6886	11.6886	34.0016	26.0929	38.6992	75	242	38	0		
43	42.3	11.7036	11.7036	34.0108	26.1029	38.7229	30	203	29	0		
44	43.3	11.7021	11.7021	34.0095	26.1096	38.7207	1.03	230	28	0		
45	44.3	11.7038	11.7038	34.0113	26.1050	38.7246	1.28	234	23	0		
46	45.3	11.7036	11.7036	34.0123	26.1259	38.7259	1.06	229	28	0		
47	46.3	11.7121	11.7121	34.0186	26.1326	38.7407	59	252	48	0		
48	47.3	11.7128	11.7128	34.0183	26.1390	38.7413	36	287	20	0		
49	48.3	11.7186	11.7186	34.0239	26.1376	38.7520	66	248	39	0		
50	49.3	11.7236	11.7236	34.0258	26.1453	38.7601	31	236	34	0		
51	50.3	11.7243	11.7243	34.0257	26.1522	38.7611	48	263	53	0		
52	51.3	11.7256	11.7256	34.0257	26.1597	38.7628	24	226	39	0		
53	52.3	11.7272	11.7272	34.0268	26.1669	38.7657	57	253	47	0		
54	53.3	11.7294	11.7294	34.0281	26.1635	38.7696	46	265	56	0		
55	54.3	11.7378	11.7378	34.0327	26.1670	38.7924	13	269	40	0		
56	55.3	11.7379	11.7379	34.0328	26.1795	38.7832	63	249	45	0		

MAXIMUM DEPTH OF CAST = 56.20m

DEPTH R.W. AVERAGED STD. DATA

START TIME = 19400303Z POSITION 40 39 50N 17 17 37W STA NO 7 LOW NO 15 INST NO 1 SHAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 4.4 BOTTOM = 100.0M SURFACE PRESS = 1.01BAR									
BIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/D XXX3	COND M/M CM	VEL M/SEC	NO. POINTS	BIN AVERAGED
1	1 24	11 4034	11 4034	32 5839	24 9383	37 1773	19	47	55
2	1 77	11 4198	11 4198	32 5779	24 9333	37 1852	17	48	54
3	2 98	11 3806	11 3806	32 5980	24 9358	37 1838	14	48	53
4	3 83	11 4026	11 4026	32 5803	24 9380	37 1741	13	48	44
5	4 95	11 4147	11 4147	32 5751	24 9379	37 1861	19	48	50
6	5 78	11 3909	11 3909	32 5971	24 9431	37 1813	20	48	47
7	6 89	11 3985	11 3985	32 7171	24 9983	37 1904	22	48	47
8	7 96	11 4278	11 4278	32 6724	24 9483	37 1904	24	52	50
9	8 96	11 4323	11 4323	32 6553	24 9454	37 1473	19	52	54
10	9 90	11 4412	11 4412	32 6458	24 9352	37 1752	29	52	55
11	10 95	11 4545	11 4545	32 5312	24 9240	37 1738	29	48	41
12	11 83	11 3636	11 3636	32 5300	24 9452	37 1911	20	48	47
13	12 88	11 3506	11 3506	32 7304	25 1488	37 1914	22	48	47
14	13 92	11 3768	11 3768	32 7546	25 1597	37 1403	22	48	51
15	14 92	11 2429	11 2429	32 7456	25 1718	37 1610	33	48	54
16	15 88	11 2275	11 2275	32 7434	25 1783	36 1654	38	48	44
17	16 92	11 3138	11 3138	32 7717	25 1887	37 1924	39	52	48
18	17 95	11 3446	11 3446	32 7262	25 1991	37 1353	33	50	46
19	18 03	11 4587	11 4587	32 8403	25 1290	37 1941	38	48	49
20	19 85	11 3985	11 3985	32 8664	25 1623	37 2665	60	50	44
21	20 93	11 3335	11 3335	32 9151	25 2201	37 2576	85	37	35
22	21 96	11 3626	11 3626	32 9807	25 2657	37 3511	67	45	42
23	22 97	11 7578	11 7578	33 2115	25 3796	37 3479	32	45	39
24	23 79	11 6806	11 6806	33 2069	25 3708	37 8727	41	74	39
25	24 88	11 4933	11 4933	33 2285	25 4534	37 7236	40	35	31
26	25 92	11 3840	11 3840	33 2520	25 4951	37 6478	1 04	29	27
27	26 93	11 2827	11 2827	33 2809	25 5407	37 5848	88	35	34
28	27 87	11 2094	11 2094	33 3235	25 5863	37 5612	20	154	53
29	28 87	11 1511	11 1511	33 3466	25 6201	37 5408	1 26	25	25
30	29 92	11 1317	11 1317	33 3693	25 6540	37 5372	1 62	19	19
31	30 91	11 1074	11 1074	33 3929	25 6776	37 5391	1 47	21	21
32	31 99	11 0967	11 0967	33 4071	25 6967	37 3441	31	38	34
33	32 82	11 0903	11 0903	33 4216	25 7094	37 3532	21	145	40
34	33 93	11 0885	11 0885	33 4447	25 7371	37 3753	96	33	31
35	34 95	11 0815	11 0815	33 4586	25 7470	37 3833	81	38	36
36	35 95	11 0812	11 0812	33 4823	25 7733	37 5073	55	58	48
37	36 88	11 0907	11 0907	33 5223	25 8097	37 2568	45	58	52
38	37 92	11 0935	11 0935	33 5253	25 8141	37 2629	51	50	55
39	38 86	11 0890	11 0890	33 5115	25 8114	37 2453	19	31	26
40	39 90	11 0887	11 0887	33 5106	25 8167	37 2445	77	40	39
41	40 94	11 0894	11 0894	33 5122	25 8189	37 2472	88	35	34
42	41 96	11 0993	11 0993	33 5491	25 8525	37 2939	57	54	46
43	42 84	11 1067	11 1067	33 5657	25 8673	37 7172	32	99	72
44	43 91	11 1155	11 1155	33 5868	25 8845	37 7477	69	46	43
45	44 97	11 1270	11 1270	33 6195	25 9179	37 7917	53	57	50
46	45 88	11 1328	11 1328	33 6323	25 9276	37 8103	49	55	51
47	46 90	11 1339	11 1339	33 6354	25 9332	37 8129	50	54	46
48	47 94	11 1370	11 1370	33 6417	25 9488	37 8246	45	57	51
49	48 89	11 1388	11 1388	33 6450	25 9600	37 8299	50	51	48
50	49 76	11 1415	11 1415	33 6509	25 9636	37 8388	77	43	41
51	50 92	11 1419	11 1419	33 6494	25 9727	37 8380	21	150	57
52	51 94	11 1420	11 1420	33 6505	25 9717	37 8398	13	49	44
53	52 94	11 1421	11 1421	33 6507	25 9824	37 8400	13	49	55
54	53 97	11 1425	11 1425	33 6508	25 9848	37 8413	12	47	52

MAXIMUM DEPTH OF CAST = 54.4M



DEPTH BIN AVERAGED CTD DATA

START TIME 194/0343Z POSITION 40 40 00N 39 19 00W STA NO 7 LOW NO 10 INST NO TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP 2M BOTTOM = 100.0M SURFACE PRES = 1.00BAR											
BIN NO	DRAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL SPT	SIGMA-T g/cm <sup>3</sup>	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	BIN WILD	
1	1 00	11 5057	11 5057	32 3151	24 6236	36 7937	65	33	12	0	
2	1 77	11 4993	11 4993	32 3166	24 6290	36 7689	19	157	58	0	
3	2 67	11 4833	11 4833	32 3172	24 6367	36 7355	75	41	40	0	
4	3 75	11 5149	11 5149	32 3164	24 6356	36 8034	70	44	43	0	
5	4 66	11 4165	11 4165	32 3205	24 6377	36 6896	25	121	84	0	
6	5 73	11 3169	11 3169	32 3101	24 6766	36 6210	65	50	42	0	
7	6 76	11 2381	11 2381	32 3246	24 7064	36 5690	44	59	57	0	
8	7 67	11 2264	11 2264	32 3310	24 7187	36 5624	46	29	59	0	
9	8 68	11 2263	11 2263	32 3380	24 7319	36 5520	58	52	60	0	
10	9 72	11 1897	11 1897	32 3429	24 7439	36 5427	70	46	40	0	
11	10 74	11 1726	11 1726	32 3485	24 7547	36 5336	70	43	40	0	
12	11 75	11 1624	11 1624	32 3551	24 7706	36 5315	47	28	37	0	
13	12 75	11 1538	11 1538	32 3639	24 7810	36 5332	45	70	37	0	
14	13 77	11 1532	11 1532	32 3782	24 8008	36 5476	94	32	30	0	
15	14 76	11 1568	11 1568	32 4225	24 8331	36 5468	1 09	29	30	0	
16	15 76	11 1626	11 1626	32 4818	24 8846	36 5618	77	39	38	0	
17	16 75	11 1549	11 1549	32 5407	24 9363	36 7140	30	106	49	0	
18	17 87	11 1461	11 1461	32 5732	24 9680	36 7405	1 04	29	34	0	
19	18 88	11 1387	11 1387	32 6091	25 9825	36 7633	1 17	37	34	0	
20	19 76	11 1037	11 1037	32 6512	25 0473	36 7822	1 05	30	30	0	
21	20 79	11 1052	11 1052	32 7190	25 1035	36 8525	44	69	55	0	
22	21 80	11 1133	11 1133	32 7513	25 1281	36 8928	48	64	55	0	
23	22 70	11 1179	11 1179	32 7626	25 1412	36 9088	73	34	32	0	
24	23 72	11 1338	11 1338	32 8034	25 1787	36 9648	81	38	34	0	
25	24 73	11 1478	11 1478	32 8317	25 2023	37 0066	83	49	43	0	
26	25 69	11 1509	11 1509	32 8330	25 2083	37 0110	77	40	39	0	
27	26 71	11 1613	11 1613	32 8544	25 2256	37 0425	83	37	35	0	
28	27 76	11 1716	11 1716	32 8802	25 2509	37 0783	46	82	58	0	
29	28 85	11 1816	11 1816	32 9086	25 2837	37 1126	57	55	35	0	
30	29 67	11 1951	11 1951	32 9392	25 2990	37 1601	96	32	30	0	
31	30 74	11 2114	11 2114	32 9749	25 3301	37 2116	96	32	29	0	
32	31 71	11 2195	11 2195	32 9911	25 3502	37 2358	75	43	41	0	
33	32 67	11 2270	11 2270	33 0103	25 3642	37 2624	48	44	33	0	
34	33 69	11 2579	11 2579	33 0990	25 4373	37 3808	85	49	42	0	
35	34 69	11 2814	11 2814	33 1291	25 4598	37 4331	85	37	34	0	
36	35 72	11 2920	11 2920	33 1544	25 4780	37 4689	79	38	32	0	
37	36 71	11 2965	11 2965	33 1682	25 5005	37 4874	54	48	42	0	
38	37 74	11 2975	11 2975	33 1900	25 5194	37 5108	56	56	51	0	
39	38 70	11 2991	11 2991	33 2021	25 5320	37 5250	56	55	45	0	
40	39 65	11 2999	11 2999	33 2075	25 5452	37 5317	85	37	31	0	
41	40 74	11 3011	11 3011	33 2131	25 5445	37 5389	83	33	31	0	
42	41 73	11 3018	11 3018	33 2178	25 5670	37 5446	83	36	33	0	
43	42 73	11 3031	11 3031	33 2231	25 5742	37 5518	39	81	26	0	
44	43 66	11 3036	11 3036	33 2251	25 5720	37 5546	70	45	43	0	
45	44 72	11 3046	11 3046	33 2393	25 5854	37 5704	86	35	33	0	
46	45 83	11 3042	11 3042	33 2492	25 5938	37 5805	29	108	77	0	
47	46 85	11 3033	11 3033	33 2512	25 6125	37 5820	51	60	53	0	
48	47 76	11 3029	11 3029	33 2542	25 6151	37 5852	18	233	58	0	
49	48 85	11 3015	11 3015	33 2583	25 6185	37 5845	14	193	53	0	

MAXIMUM DEPTH OF CAST = 49.24M

DEP H BIN AVERAGED STD DATA

START TIME = 194.33187 POSITION 40 50 04N 007 35 04W											
BIN NO = 1 3M DEPTH = 12 CM INST NO. 1 TAP NO. 1											
BIN SIZE = 1 0M DEPTH = 100 CM SURFACE PRESS = 1.00BAR											
RIN NO	DRAR M	PART-T DEPTH	ACCR-T DEPTH	SAL PPT	STRA-T GRAVITY	COND MMVCM	VEL M/SEC	NO. POINTS	MIN	MAX	WELD
1	78	12 3533	12 3533	31 3888	24 2032	36 2938	14	198	65	0	
2	79	12 3533	12 3533	31 3888	24 2032	36 2938	14	198	65	0	
3	80	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
4	81	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
5	82	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
6	83	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
7	84	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
8	85	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
9	86	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
10	87	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
11	88	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
12	89	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
13	90	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
14	91	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
15	92	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
16	93	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
17	94	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
18	95	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
19	96	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
20	97	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
21	98	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
22	99	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
23	100	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
24	101	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
25	102	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
26	103	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
27	104	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
28	105	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
29	106	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
30	107	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
31	108	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
32	109	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
33	110	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
34	111	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	
35	112	11 3533	11 3533	31 3888	24 2032	36 2938	14	198	65	0	

MAXIMUM DEPTH OF CAST = 35.22m

DEPTH BIN AVERAGED CTD DATA

START TIME = 194/22567 POSITION 40 45 24N TAPE NO 35 36W STA NO 7 L1W NO 18 INST NO 3 TAPE NO 35 36W BIN SIZE = 1 0M DEPTHS TOP = 0M BOTTOM = 100 0M SURFACE PRES = 1 000BAR											
BIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CMM*3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WILD	
1	1 80	17 1264	17 1264	31 8554	23 2479	41 1553	24	27	11	2	
2	1 77	16 1278	16 1278	31 8620	23 2367	40 1508	1 11	27	25	0	
3	3 24	13 1213	13 1213	31 9457	23 3747	40 7883	1 19	159	44	0	
4	5 23	13 9075	13 9075	31 9731	23 4822	40 4867	1 40	23	21	0	
5	7 24	13 8224	13 8224	31 9528	23 5346	40 1239	1 03	36	10	0	
6	9 81	15 1299	15 1299	31 9292	23 6281	39 6494	23	142	36	0	
7	12 22	14 4634	14 4634	31 9546	23 7954	37 8735	1 58	13	19	0	
8	13 31	13 1727	13 1727	31 9952	23 7151	38 3021	1 37	32	26	0	
9	15 63	12 8910	12 8910	31 9996	24 1008	37 9647	26	176	48	0	
10	17 63	12 8910	12 8910	32 0106	24 1585	37 7192	99	32	31	0	
11	19 74	12 1661	12 1661	31 9264	24 2508	36 2848	1 13	28	26	0	
12	21 79	11 5087	11 5087	31 9082	24 4686	36 5170	30	49	40	0	
13	23 54	11 3632	11 3632	31 1193	24 5539	36 4706	36	69	53	0	
14	25 73	11 2352	11 2352	31 1358	24 5922	36 3744	23	83	52	0	
15	27 02	11 9548	11 9548	32 1533	24 6473	36 2326	37	40	37	0	
16	29 63	10 9521	10 9521	32 1821	24 6897	36 1710	46	27	46	0	
17	31 70	10 3924	10 3924	32 1909	24 7180	36 1275	1 10	26	26	0	
18	33 76	10 8623	10 8623	32 1972	24 7252	36 1077	96	32	32	0	
19	35 62	10 8530	10 8530	32 2058	24 7385	36 1084	23	36	57	0	
20	37 59	10 8219	10 8219	32 2115	24 7530	36 0870	1 22	26	26	0	
21	39 73	10 8062	10 8062	32 2136	24 7646	36 0757	1 34	23	23	0	
22	41 78	10 8008	10 8008	32 2167	24 7750	36 0744	23	34	33	0	
23	43 21	10 8037	10 8037	32 2179	24 7759	36 0785	24	31	21	0	
24	45 74	10 7832	10 7832	32 2190	24 7846	36 0620	26	32	29	0	
25	47 76	10 7834	10 7834	32 2202	24 7914	36 0638	27	33	32	0	
26	49 80	10 7881	10 7881	32 2215	24 7979	36 0627	40	28	51	0	
27	51 63	10 7839	10 7839	32 2215	24 8017	36 0653	53	38	48	0	
28	53 69	10 7790	10 7790	32 2215	24 8061	36 0623	21	34	33	0	
29	55 71	10 7787	10 7787	32 2215	24 8158	36 0677	29	46	39	0	
30	57 67	10 7810	10 7810	32 2231	24 8187	36 0666	36	89	64	0	
31	59 68	10 7755	10 7755	32 2223	24 8228	36 0614	86	35	32	0	
32	61 72	10 7747	10 7747	32 2230	24 8317	36 0617	86	36	36	0	
33	63 80	10 7760	10 7760	32 2236	24 8417	36 0637	20	154	23	0	
34	65 83	10 7724	10 7724	32 2238	24 8429	36 0614	14	252	25	0	
35	67 65	10 7706	10 7706	32 2246	24 8461	36 0610	32	26	26	0	
36	69 57	10 7674	10 7674	32 2255	24 8568	36 0595	18	168	49	0	
37	71 75	10 7652	10 7652	32 2251	24 8662	36 0566	16	176	26	0	
38	73 82	10 7646	10 7646	32 2262	24 8645	36 0587	17	182	25	0	
39	75 87	10 7660	10 7660	32 2262	24 8675	36 0603	20	158	29	0	
40	77 91	10 7660	10 7660	32 2264	24 8711	36 0608	14	114	109	0	

MAXIMUM DEPTH OF CTD = 40 0M

DEPTH RIN AVERAGED STD DATA

START TIME 194/2337 POSITION 40 40 00N 17 36 00W STA NO 7 10W NO 17 10W NO 17 10W RIN SIZE = 1.0M DEPTH TOP = 1.5M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
RIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM3	COND MM/M	VFL M/SEC	NO TOTAL	PHYS NO	RIN	NO
1	2 02	14 9951	14 9951	31 8897	23 5094	32 4809	16	147	43	0	0
2	3 05	14 9210	14 9210	31 9274	23 4720	32 5573	83	147	43	0	0
3	4 00	13 9639	13 9639	31 9608	23 4120	32 5511	81	147	43	0	0
4	4 99	13 0246	13 0346	31 7752	23 9383	32 5876	81	147	43	0	0
5	5 07	12 1870	12 1870	32 0166	24 9905	32 0948	72	147	43	0	0
6	5 93	11 8874	11 8874	32 1037	24 4177	36 9187	21	146	34	0	0
7	6 05	11 9561	11 9561	32 1427	24 4988	36 7873	10	146	34	0	0
8	6 99	11 4325	11 4325	32 1559	24 5514	36 5681	19	159	32	0	0
9	10 02	11 3419	11 3419	32 1970	24 6048	36 5297	103	159	32	0	0
10	11 12	11 2883	11 2883	32 2080	24 6274	36 4939	51	159	32	0	0
11	11 58	11 1969	11 1969	32 1975	24 6405	36 4824	35	143	32	0	0
12	13 32	11 1538	11 1538	32 1909	24 6560	36 3868	75	143	32	0	0
13	14 00	11 1399	11 1399	32 2133	24 6775	36 3599	33	143	32	0	0
14	14 99	11 1208	11 1208	32 2195	24 6860	36 3544	85	143	32	0	0
15	15 06	11 1244	11 1244	32 2237	24 6963	36 3662	126	143	32	0	0
16	17 16	11 1298	11 1298	32 2269	24 7004	36 3747	20	143	32	0	0
17	17 95	11 1327	11 1327	32 2292	24 7045	36 3799	90	143	32	0	0
18	19 02	11 1385	11 1385	32 2326	24 7193	36 3890	96	143	32	0	0
19	20 05	11 1443	11 1443	32 2359	24 7311	36 3979	31	143	32	0	0
20	20 96	11 1496	11 1496	32 2411	24 7351	36 4083	59	143	32	0	0
21	23 10	11 1549	11 1549	32 2453	24 7360	36 4177	68	143	32	0	0
22	23 30	11 1588	11 1588	32 2475	24 7395	36 4239	32	143	32	0	0
23	23 96	11 1627	11 1627	32 2515	24 7521	36 4318	70	143	32	0	0
24	25 09	11 1641	11 1641	32 2621	24 7602	36 4443	58	143	32	0	0
25	25 97	11 0764	11 0764	32 2927	24 8020	36 3976	34	143	32	0	0
26	26 99	10 9549	10 9549	32 3184	24 8526	36 3159	75	143	32	0	0
27	28 07	10 8950	10 8950	32 3334	24 8776	36 2782	41	143	32	0	0
28	28 94	10 8667	10 8667	32 3414	24 8898	36 2614	47	143	32	0	0
29	30 02	10 8395	10 8395	32 3401	24 9021	36 2364	77	143	32	0	0
30	31 10	10 8128	10 8128	32 3431	24 9170	36 2161	33	143	32	0	0
31	31 94	10 8249	10 8249	32 3449	24 9232	36 2291	52	143	32	0	0
32	33 05	10 8089	10 8089	32 3444	24 9240	36 2148	77	143	32	0	0
33	34 07	10 7874	10 7874	32 3502	24 9405	36 2018	43	143	32	0	0
34	34 96	10 7835	10 7835	32 3518	24 9459	36 2084	56	143	32	0	0
35	36 05	10 7793	10 7793	32 3540	24 9529	36 1993	59	143	32	0	0
36	36 97	10 7769	10 7769	32 3559	24 9578	36 1934	32	143	32	0	0
37	38 01	10 7760	10 7760	32 3559	24 9601	36 1992	79	143	32	0	0
38	39 11	10 7754	10 7754	32 3558	24 9659	36 1990	19	143	32	0	0
39	40 02	10 7753	10 7753	32 3557	24 9724	36 1991	51	143	32	0	0
40	41 01	10 7756	10 7756	32 3580	24 9813	36 2021	15	143	32	0	0
41	42 06	10 7765	10 7765	32 3608	24 9926	36 2063	32	143	32	0	0
42	42 97	10 7765	10 7765	32 3613	24 9912	36 2070	05	143	32	0	0
43	43 93	10 7763	10 7763	32 3636	24 9944	36 2097	08	143	32	0	0

MAXIMUM DEPTH OF CAST = 44.52M

DEPTH BIN AVERAGED CTD DATA

START TIME = 199/0112 POSITION 40 35 15N 09 30 10W STA NO = 7 LOW NO INST NO TIME NO BIN SIZE = 1.0M DEPTHS TOP = 2M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
RIN NO	DBAR M	FAST-T DEG-C	ACQUH-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	RIN WLD	
1	93	12	3212	32	3768	24	4417	37	4839	13	31
2	62	12	4803	32	3311	24	3795	37	3795	24	128
3	32	11	8827	32	1874	24	4632	36	9921	31	38
4	00	11	8158	32	2113	24	5356	36	7859	59	54
5	59	11	4108	32	3424	24	6007	36	6353	30	104
6	72	11	2984	32	2767	24	6534	36	5705	1	84
7	29	11	3511	32	2904	24	6769	36	6422	1	84
8	52	11	3306	32	3054	24	6973	36	6402	29	46
9	25	11	2957	32	3276	24	7232	36	6409	29	105
10	71	11	1871	32	3411	24	7424	36	5385	52	46
11	71	11	1833	32	3508	24	7544	36	5453	58	53
12	71	11	1805	32	3599	24	7684	36	5525	52	59
13	63	11	1804	32	3689	24	7796	36	5619	34	90
14	69	11	1826	32	3896	24	8004	36	5853	75	42
15	78	11	1883	32	4061	24	8166	36	6076	66	48
16	71	11	1904	32	4144	24	8277	36	6183	41	73
17	73	11	1881	32	4231	24	8401	36	6254	65	57
18	72	11	1834	32	4353	24	8554	36	6341	35	97
19	72	11	1772	32	4546	24	8772	36	6485	64	44
20	73	11	1745	32	4821	24	9034	36	6744	92	36
21	75	11	1828	32	5196	24	9342	36	7203	60	49
22	58	11	2028	32	5606	24	9684	36	7802	24	125
23	67	11	2185	32	6113	24	10122	36	8461	39	31
24	73	11	2301	32	6350	24	10288	36	8810	38	33
25	78	11	2552	32	6817	24	10883	36	9515	22	136
26	70	11	2672	32	7134	25	0993	36	9948	85	37
27	28	11	2987	32	7625	25	1312	37	1235	31	37
28	69	11	3657	32	8557	25	1547	37	1709	43	71
29	65	11	4488	32	8546	25	1843	37	2039	37	46
30	65	11	5719	32	9028	25	2010	37	4651	36	87
31	70	11	5536	32	9232	25	2280	37	4698	77	39
32	76	11	4903	32	9193	25	2404	37	4086	70	44
33	73	11	3255	32	9109	25	2729	37	2511	32	96
34	67	11	2896	32	9576	25	3202	37	2662	57	55
35	72	11	3820	33	0391	25	3678	37	4335	69	45
36	73	11	4322	33	0614	25	3830	37	5023	51	61
37	68	11	4424	33	0641	25	3867	37	5147	57	46
38	74	11	4965	33	1163	25	4238	37	5176	84	38
39	78	11	4603	33	1289	25	4490	37	5979	48	62
40	65	11	4139	33	1243	25	4538	37	5512	37	84
41	67	11	3583	33	1164	25	4704	37	4930	50	48
42	71	11	3055	33	1334	25	4926	37	4624	83	37
43	70	11	2880	33	1318	25	5195	37	4656	86	36
44	74	11	2628	33	1517	25	5222	37	4430	58	53
45	54	11	2390	33	1648	25	5411	37	4349	29	106
46	69	11	2272	33	1802	25	5623	37	4402	1	22
47	72	11	2173	33	1934	25	5825	37	4442	1	31
48	81	11	2039	33	1974	25	5834	37	4572	1	24
49	84	11	1852	33	1981	25	6071	37	4812	1	10
50	70	11	1645	33	2024	25	6042	37	4071	1	40
51	75	11	1356	33	2215	25	6240	37	4006	1	37
52	82	11	1381	33	2790	25	6856	37	4614	1	21
53	73	11	1622	33	1274	25	7133	37	5326	1	05
54	77	11	1805	33	3506	25	7463	37	5735	1	86
55	59	11	2004	33	3863	25	7699	37	6079	1	19
56	79	11	2391	33	4255	25	7907	37	7036	14	209
57	77	11	2710	33	4821	25	8359	37	7906	14	172
58	72	11	2903	33	5050	25	8608	37	8320	15	206
59	76	11	3030	33	5201	25	8654	37	8593	16	14

MAXIMUM DEPTH OF CAST = 59.21M

DEPTH BIN AVERAGED CTD DATA

START TIME = 19511127 POSITION 40 32 04N 67 27 21W STATION NO = 7150W V# 21 INST NO 1 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0M BOTTOM = 100.0M SURFACE PRES = 1000MB												
BIN NO	DEAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND CM/CM	VEL M/SEC	NO TOTAL	POINTS BIN USED	MIN	MAX	AVG
1	1 01	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
2	1 02	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
3	1 03	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
4	1 04	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
5	1 05	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
6	1 06	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
7	1 07	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
8	1 08	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
9	1 09	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
10	1 10	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
11	1 11	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
12	1 12	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
13	1 13	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
14	1 14	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
15	1 15	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
16	1 16	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
17	1 17	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
18	1 18	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
19	1 19	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
20	1 20	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
21	1 21	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
22	1 22	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
23	1 23	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
24	1 24	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
25	1 25	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
26	1 26	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
27	1 27	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
28	1 28	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
29	1 29	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
30	1 30	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
31	1 31	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
32	1 32	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
33	1 33	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
34	1 34	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
35	1 35	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
36	1 36	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
37	1 37	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
38	1 38	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
39	1 39	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
40	1 40	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
41	1 41	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
42	1 42	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
43	1 43	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
44	1 44	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
45	1 45	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
46	1 46	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
47	1 47	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
48	1 48	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
49	1 49	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
50	1 50	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
51	1 51	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
52	1 52	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
53	1 53	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
54	1 54	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0
55	1 55	13 0359	13 0359	33 3201	34 9621	39 0202	10	129	30	0	0	0

MAXIMUM DEPTH OF CAST = 55.0M

DEPTH BIN AVERAGED CTD DATA

START TIME = 195.0204Z POSITION = 40 34 28N 89 58 00W STA NO = 7104 NO. INST = 22 TAPF NO. 1 BIN SIZE = 1.0M DEPTHS TOP = 2M BOTTOM = 100.0M SURFACE PRESS = 1.00DBAR										
BIN NO.	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEI M/SEC	TOTAL	POINTING BIN	WELD
1	92	12 1100	12 1100	32 5020	24 7794	37 6937	24	56	13	0
2	1 79	11 9526	11 9526	32 7000	24 8424	37 5906	17	180	55	0
3	2 71	12 0232	12 0232	32 7083	24 8400	37 6033	19	180	55	0
4	3 69	12 0989	12 0989	32 6841	24 8122	37 7074	48	180	55	0
5	4 74	12 0538	12 0538	32 6703	24 8147	37 6527	25	180	55	0
6	5 69	12 0550	12 0550	32 6685	24 8181	37 6523	35	56	55	0
7	6 77	12 0368	12 0368	32 6723	24 8293	37 6403	24	180	55	0
8	7 69	12 0490	12 0490	32 6802	24 8393	37 6579	67	46	48	0
9	8 70	12 0219	12 0219	32 6859	24 8350	37 6410	31	54	48	0
10	9 70	11 7094	11 7094	32 7469	24 9575	37 4156	31	54	55	0
11	10 77	11 5141	11 5141	32 8256	25 0645	37 3259	46	56	57	0
12	11 68	11 5115	11 5115	32 8493	25 0886	37 3480	43	71	58	0
13	12 72	11 5406	11 5406	32 8693	25 1075	37 3953	42	75	58	0
14	13 67	11 5373	11 5373	32 8714	25 1091	37 3949	48	54	45	0
15	14 70	11 4791	11 4791	32 8745	25 1281	37 3456	70	45	45	0
16	15 76	11 4345	11 4345	32 8734	25 1386	37 3045	61	49	47	0
17	16 72	11 4073	11 4073	32 8790	25 1531	37 2859	76	45	67	0
18	17 67	11 3484	11 3484	32 8813	25 1769	37 2354	70	44	41	0
19	18 70	11 3389	11 3389	32 9305	25 2153	37 2771	83	47	35	0
20	19 77	11 3796	11 3796	32 9762	25 2490	37 3610	48	26	51	0
21	20 68	11 3795	11 3795	33 0025	25 2764	37 3880	52	58	48	0
22	21 72	11 4279	11 4279	33 0274	25 2935	37 4579	81	48	37	0
23	22 73	11 5074	11 5074	33 0867	25 3253	37 5910	62	49	47	0
24	23 68	11 5812	11 5812	33 1562	25 3563	37 7093	50	65	56	0
25	24 69	11 6845	11 6845	33 2076	25 3941	37 8773	77	40	54	0
26	25 70	11 6983	11 6983	33 2778	25 4513	37 9622	96	72	32	0
27	26 71	11 5846	11 5846	33 3351	25 5247	37 9127	73	42	59	0
28	27 72	11 4789	11 4789	33 3389	25 5327	37 8339	37	45	54	0
29	28 68	11 3933	11 3933	33 3719	25 5959	37 7992	36	46	43	0
30	29 70	11 3849	11 3849	33 3908	25 6208	37 7912	1 19	26	26	0
31	30 73	11 3572	11 3572	33 4006	25 6377	37 7761	1 05	30	30	0
32	31 77	11 3307	11 3307	33 4108	25 6526	37 7635	51	59	58	0
33	32 63	11 2936	11 2936	33 4046	25 6579	37 7276	48	64	57	0
34	33 70	11 2857	11 2857	33 4173	25 6736	37 7286	90	75	33	0
35	34 74	11 2868	11 2868	33 4251	25 6873	37 7380	79	36	34	0
36	35 75	11 2786	11 2786	33 4280	25 6954	37 7338	48	66	49	0
37	36 66	11 2649	11 2649	33 4267	25 7060	37 7207	77	40	35	0
38	37 70	11 2270	11 2270	33 4370	25 7274	37 6964	1 10	38	38	0
39	38 71	11 2429	11 2429	33 4653	25 7438	37 7400	1 14	37	36	0
40	39 80	11 2540	11 2540	33 4894	25 7731	37 7749	1 54	57	58	0
41	40 57	11 2551	11 2551	33 5034	25 7814	37 7905	33	93	64	0
42	41 67	11 2436	11 2436	33 5266	25 8032	37 8038	1 10	28	27	0
43	42 73	11 2349	11 2349	33 5488	25 8347	37 8188	1 35	74	23	0
44	43 75	11 2338	11 2338	33 5635	25 8486	37 8331	1 07	28	28	0
45	44 81	11 2354	11 2354	33 5779	25 8550	37 8495	31	51	49	0
46	45 67	11 2413	11 2413	33 5906	25 8717	37 8682	55	56	48	0
47	46 73	11 2515	11 2515	33 6059	25 8919	37 8936	83	37	34	0
48	47 77	11 2633	11 2633	33 6250	25 9069	37 9244	46	54	54	0
49	48 64	11 2777	11 2777	33 6436	25 9305	37 9552	89	45	45	0
50	49 69	11 3041	11 3041	33 6673	25 9423	38 0055	1 14	27	26	0
51	50 73	11 3279	11 3279	33 6951	25 9573	38 0561	1 19	29	25	0
52	51 86	11 4170	11 4170	33 7630	26 0106	38 2080	1 37	43	34	0
53	52 62	11 4431	11 4431	33 7815	26 0150	38 2512	37	44	37	0
54	53 76	11 4727	11 4727	33 8038	26 0396	38 3019	25	132	22	0
55	54 70	11 6263	11 6263	33 9155	26 1022	38 3588	45	72	26	0

MAXIMUM DEPTH OF CAST = 55.2M

DEPTH BIN AVERAGED CTD DATA

START TIME 195-0240Z POSITION 40 34 55N 69 26 53W STA NO 7 LOW NO 23 INST NO 3 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP 1 2M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
RIN NO	DRAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/RTN USED	RTN WTD	
1	61	12 1851	12 1851	32 4881	24 6293	37 5809	20	159	109	0	0
2	1 62	12 1855	12 1855	32 5304	24 6820	37 5534	19	164	97	0	0
3	2 62	12 1713	12 1713	32 5413	24 6834	37 6244	24	43	41	0	0
4	3 62	12 1395	12 1395	32 5390	24 6847	37 5836	57	54	52	0	0
5	4 68	12 2558	12 2558	32 5726	24 7003	37 7343	21	140	51	0	0
6	5 70	12 4576	12 4576	32 5730	24 6876	37 9180	31	39	36	0	0
7	6 79	12 2369	12 2369	32 5294	24 6804	37 6733	47	67	67	0	0
8	7 69	12 0404	12 0404	32 5102	24 7079	37 4763	32	94	88	0	0
9	8 74	11 7903	11 7903	32 4600	24 7208	37 1998	55	56	49	0	0
10	9 70	11 3966	11 3966	32 4801	24 7512	36 7856	40	79	65	0	0
11	10 71	11 2648	11 2648	32 4447	24 8142	36 7134	62	51	45	0	0
12	11 62	11 2409	11 2409	32 4520	24 8281	36 6999	38	79	62	0	0
13	12 65	11 2194	11 2194	32 4551	24 8402	36 6843	49	53	47	0	0
14	13 64	11 1994	11 1994	32 4610	24 8513	36 6728	77	41	39	0	0
15	14 62	11 1959	11 1959	32 4640	24 8626	36 6712	39	80	54	0	0
16	15 64	11 1934	11 1934	32 4664	24 8665	36 6737	53	60	52	0	0
17	16 74	11 1941	11 1941	32 4682	24 8720	36 6766	75	45	37	0	0
18	17 73	11 1955	11 1955	32 4681	24 8778	36 6781	58	79	57	0	0
19	18 75	11 1939	11 1939	32 4726	24 8861	36 6818	67	46	45	0	0
20	19 71	11 1924	11 1924	32 4799	24 8980	36 6881	72	44	39	0	0
21	20 69	11 1889	11 1889	32 4893	24 9111	36 6950	32	95	76	0	0
22	21 73	11 1860	11 1860	32 5026	24 9303	36 7064	70	44	40	0	0
23	22 75	11 1869	11 1869	32 5217	24 9449	36 7269	62	50	46	0	0
24	23 60	11 1897	11 1897	32 5407	24 9647	36 7491	39	84	66	0	0
25	24 71	11 1961	11 1961	32 5586	24 9757	36 7734	91	34	33	0	0
26	25 76	11 2001	11 2001	32 5624	24 9938	36 7813	75	41	38	0	0
27	26 62	11 2021	11 2021	32 5639	24 9903	36 7840	26	114	83	0	0
28	27 69	11 2398	11 2398	32 5987	25 0255	36 8546	85	37	34	0	0
29	28 75	11 2186	11 2186	32 6788	25 0913	36 9172	67	46	41	0	0
30	29 57	11 2081	11 2081	32 7253	25 1358	36 9554	50	63	54	0	0
31	30 71	11 2057	11 2057	32 7597	25 1678	36 9885	60	50	46	0	0
32	31 75	11 2084	11 2084	32 7858	25 1962	37 0178	41	78	60	0	0
33	32 64	11 2040	11 2040	32 8235	25 2305	37 0525	53	57	49	0	0
34	33 72	11 2034	11 2034	32 8760	25 2717	37 1055	88	36	34	0	0
35	34 72	11 2150	11 2150	32 9051	25 2958	37 1459	86	36	33	0	0
36	35 73	11 2216	11 2216	32 9412	25 3250	37 1888	27	114	83	0	0
37	36 66	11 2310	11 2310	33 0048	25 3787	37 2622	31	58	35	0	0
38	37 20	11 2949	11 2949	33 0955	25 4398	37 4137	13	28	27	0	0
39	38 73	11 3086	11 3086	33 1695	25 5079	37 5086	78	33	30	0	0
40	39 75	11 3260	11 3260	33 2222	25 5494	37 5704	22	135	55	0	0
41	40 73	11 3511	11 3511	33 2651	25 5858	37 6373	88	35	37	0	0
42	41 71	11 3664	11 3664	33 3303	25 6369	37 7179	93	43	33	0	0
43	42 79	11 3468	11 3468	33 3705	25 6698	37 7412	45	71	51	0	0
44	43 58	11 3349	11 3349	33 4061	25 7027	37 7606	23	133	84	0	0
45	44 58	11 3069	11 3069	33 4586	25 7570	37 7965	83	37	35	0	0
46	45 73	11 2971	11 2971	33 4901	25 7848	37 8179	83	37	36	0	0
47	46 67	11 2908	11 2908	33 5055	25 8054	37 8282	15	100	80	0	0
48	47 73	11 2861	11 2861	33 5126	25 8314	37 8364	04	800	74	0	0
49	48 74	11 2804	11 2804	33 5327	25 8415	37 8470	06	578	82	0	0

MAXIMUM DEPTH OF CAST = 49.0M



DEPTH FROM SURFACE TO 7000

START TIME = 195 1330 POSITION 40 34 30N 155 05 7W DATA NO. 11 DEPTH TOP = 0.00M BOTTOM = 1000.00M SURFACE PRESS = 1000.00MBAR										
BIN NO	DRAR M	FAST-T DEG-C	ACQU-T DEG-C	SAC PPT	SIGMA-T G/CM <sup>2</sup>	COND CM/CM	VEL M/SEC	WAVE PERIOD	PERIOD SEC	WAVE NO
1	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
2	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
3	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
4	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
5	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
6	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
7	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
8	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
9	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
10	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
11	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
12	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
13	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
14	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
15	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
16	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
17	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
18	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
19	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
20	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
21	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
22	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
23	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
24	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
25	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
26	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
27	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
28	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
29	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
30	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
31	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
32	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
33	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
34	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
35	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
36	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
37	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
38	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
39	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
40	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
41	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
42	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
43	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
44	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
45	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
46	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
47	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
48	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
49	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1
50	1 13	11 3089	11 3089	32 4323	24 7000	36 7020	12	34	4	1

MAXIMUM DEPTH OF CAST = 50 01M

DEPTH BIN AVERAGED CTD DATA

START TIME: 198/0739T POSITION: 40 54 26N 59 43 05W											
STA NO: 7 LOW NO: 25 TAP: NO: 1											
BIN SIZE = 1.0M DEPTHS: TOP = 3.3M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	WILD	
1	4 35	12 6742	12 6742	31 2414	23 2750	37 2433	73	44	37	0	
2	4 34	12 6745	12 6745	31 2435	23 2800	37 2411	73	44	37	0	
3	4 33	12 6733	12 6733	31 2435	23 2862	37 2413	73	44	37	0	
4	4 30	12 6751	12 6751	31 2435	23 2807	37 2434	73	44	37	0	
5	4 29	12 6752	12 6752	31 2435	23 2969	37 2443	73	44	37	0	
6	8 84	12 6853	12 6853	31 2456	23 9997	37 2556	55	36	34	0	
7	8 31	12 6862	12 6862	31 2451	24 0042	37 2563	55	41	36	0	
8	10 04	12 6849	12 6849	31 2442	24 0027	37 2546	55	41	36	0	
9	11 34	12 6843	12 6843	31 2448	24 0134	37 2555	55	40	36	0	
10	12 38	12 6844	12 6844	31 2446	24 0189	37 2563	55	40	36	0	
11	13 29	12 6845	12 6845	31 2443	24 0247	37 2555	55	41	36	0	
12	14 02	12 6754	12 6754	31 2431	24 0384	37 2467	55	40	36	0	
13	15 03	12 6700	12 6700	31 2440	24 0545	37 2431	55	40	36	0	
14	16 40	12 6688	12 6688	31 2449	24 0475	37 2436	55	40	36	0	
15	17 35	12 6684	12 6684	31 2452	24 0501	37 2439	55	40	36	0	
16	18 01	12 6680	12 6680	31 2446	24 0482	37 2432	55	40	36	0	
17	19 00	12 6671	12 6671	31 2447	24 0554	37 2430	55	40	36	0	
18	20 00	12 6680	12 6680	31 2453	24 0560	37 2448	55	40	36	0	
19	21 38	12 6691	12 6691	31 2454	24 0739	37 2463	55	40	36	0	
20	22 35	12 6690	12 6690	31 2450	24 0867	37 2462	55	40	36	0	
21	23 20	12 6690	12 6690	31 2451	24 0849	37 2466	55	40	36	0	
22	24 34	12 6687	12 6687	31 2452	24 0813	37 2470	55	40	36	0	
23	25 00	12 6684	12 6684	31 2446	24 0843	37 2465	55	40	36	0	
24	26 38	12 6674	12 6674	31 2441	24 0912	37 2462	55	40	36	0	
25	27 32	12 6670	12 6670	31 2445	24 0906	37 2460	55	40	36	0	

MAXIMUM DEPTH OF CAST = 28.3M

DEPTH BIN AVERAGED CTD DATA

START TIME: 198/0815Z POSITION: 40 50 26N 59 43 05W											
STA NO: 7 LOW NO: 25 TAP: NO: 1											
BIN SIZE = 1.0M DEPTHS: TOP = 5M BOTTOM = 100.0M SURFACE PRES = 1.000BAR											
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS USED	WILD	
1	1 46	12 4651	12 4651	31 8322	24 0728	37 1480	72	5	4	0	
2	1 31	12 4620	12 4620	31 8277	24 0726	37 1408	71	151	88	0	
3	1 05	12 4566	12 4566	31 8294	24 0808	37 1383	70	77	57	0	
4	3 35	12 4569	12 4569	31 8296	24 0858	37 1390	47	66	57	0	
5	5 00	12 4565	12 4565	31 8297	24 0906	37 1390	59	52	45	0	
6	6 01	12 4559	12 4559	31 8300	24 0957	37 1393	46	67	56	0	
7	6 29	12 4556	12 4556	31 8303	24 1020	37 1398	66	49	44	0	
8	7 38	12 4556	12 4556	31 8301	24 1055	37 1400	86	35	30	0	
9	9 00	12 4552	12 4552	31 8303	24 1114	37 1402	75	35	30	0	
10	10 03	12 4551	12 4551	31 8304	24 1166	37 1407	58	52	50	0	
11	10 36	12 4541	12 4541	31 8308	24 1192	37 1407	55	56	46	0	
12	12 00	12 4543	12 4543	31 8307	24 1251	37 1412	70	45	43	0	
13	13 03	12 4540	12 4540	31 8310	24 1295	37 1415	68	48	44	0	
14	14 05	12 4543	12 4543	31 8305	24 1370	37 1420	70	43	37	0	
15	15 06	12 4544	12 4544	31 8309	24 1391	37 1422	67	45	39	0	
16	16 03	12 4527	12 4527	31 8313	24 1483	37 1420	59	55	51	0	
17	17 00	12 4515	12 4515	31 8319	24 1511	37 1420	61	49	46	0	
18	18 01	12 4514	12 4514	31 8316	24 1548	37 1420	60	51	46	0	
19	19 00	12 4513	12 4513	31 8319	24 1623	37 1427	65	49	41	0	
20	20 01	12 4515	12 4515	31 8317	24 1653	37 1430	61	49	40	0	
21	21 02	12 4514	12 4514	31 8316	24 1703	37 1433	55	58	48	0	
22	22 01	12 4512	12 4512	31 8321	24 1786	37 1440	56	47	43	0	
23	23 03	12 4507	12 4507	31 8321	24 1811	37 1432	54	57	51	0	
24	23 38	12 4514	12 4514	31 8319	24 1807	37 1449	61	51	50	0	
25	25 00	12 4519	12 4519	31 8315	24 1892	37 1452	59	45	43	0	
26	26 02	12 4518	12 4518	31 8318	24 1959	37 1459	55	49	46	0	
27	26 38	12 4518	12 4518	31 8317	24 2005	37 1461	54	52	49	0	
28	29 00	12 4482	12 4482	31 8350	24 2088	37 1469	57	45	50	0	
29	29 04	12 4516	12 4516	31 8318	24 2087	37 1470	55	50	49	0	
30	30 04	12 4518	12 4518	31 8322	24 2179	37 1476	54	49	49	0	
31	30 26	12 4518	12 4518	31 8318	24 2155	37 1472	47	58	51	0	
32	32 02	12 4524	12 4524	31 8317	24 2208	37 1488	55	48	50	0	
33	33 08	12 4539	12 4539	31 8317	24 2305	37 1475	57	524	50	0	
34	34 12	12 4537	12 4537	31 8312	24 2341	37 1503	64	712	186	0	

MAXIMUM DEPTH OF CAST = 34.50M

10-10-50 AVERAGE OF 100 READS

TIME = 1400.18537 POSITION = 40 40 138 TIME NO = 39 40 950 BIN NO = 1000 DEPTH = 1.00M TOP = 1.00M BOTTOM = 1.00M SURFACE PLT = 1.00M									
BIN NO	DEPTH	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	STGMA-T G/CM**3	COND MM/CM	VEL M/SEC	TEMP	POSSIBLE
11	10	11 2000	11 2000	31 2705	23 9985	36 7500	*****	10	0
11	11	11 2177	11 2177	31 2644	24 3923	36 7241	*****	10	0
11	11	11 4498	11 4498	31 1987	24 3500	36 5245	*****	10	0
11	11	11 4400	11 4400	31 1916	24 3514	36 5690	*****	10	0
11	11	11 4400	11 4400	31 1781	24 3441	36 5937	*****	10	0
11	11	11 4253	11 4253	31 1988	24 3708	36 5050	*****	10	0
11	11	11 4200	11 4200	31 2644	24 3794	36 5056	*****	10	0
11	11	11 4200	11 4200	31 1973	24 3794	36 5056	*****	10	0
11	11	11 4150	11 4150	31 1943	24 3849	36 5056	*****	10	0
11	11	11 4060	11 4060	31 1992	24 3941	36 5890	*****	10	0
11	11	11 4000	11 4000	31 2040	24 3052	36 5890	*****	10	0
11	11	11 4000	11 4000	31 2036	24 3088	36 5890	*****	10	0
11	11	11 4000	11 4000	31 2032	24 3090	36 5890	*****	10	0
11	11	11 3719	11 3719	31 2098	24 6211	36 5890	*****	10	0
11	11	11 3900	11 3900	31 2030	24 6238	36 5890	*****	10	0
11	11	11 3867	11 3867	31 1930	24 5247	36 5080	*****	10	0
11	11	11 3514	11 3514	31 2158	24 5467	36 5080	*****	10	0
11	11	11 3061	11 3061	31 2133	24 5711	36 5080	*****	10	0
11	11	11 3138	11 3138	31 2151	24 5714	36 5080	*****	10	0
11	11	11 3066	11 3066	31 2144	24 5640	36 5080	*****	10	0
11	11	11 2843	11 2843	31 2214	24 5934	36 5080	*****	10	0
11	11	11 2939	11 2939	31 2127	24 5855	36 5080	*****	10	0
11	11	11 2794	11 2794	31 2249	24 7037	36 5080	*****	10	0
11	11	11 2606	11 2606	31 2239	24 7108	36 4907	*****	10	0
11	11	11 2652	11 2652	31 2169	24 7022	36 4880	*****	10	0
11	11	11 2598	11 2598	31 2212	24 7086	36 4880	*****	10	0
11	11	11 2454	11 2454	31 2334	24 7329	36 4880	*****	10	0
11	11	11 2588	11 2588	31 2313	24 7225	36 4880	*****	10	0
11	11	11 2580	11 2580	31 2315	24 7315	36 4880	*****	10	0
11	11	11 2475	11 2475	31 2303	24 7502	36 4880	*****	10	0
11	11	11 2401	11 2401	31 2363	24 7520	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2361	24 7644	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2356	24 7771	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2352	24 7665	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2348	24 7671	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2344	24 7734	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2340	24 7785	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2336	24 7738	36 4880	*****	10	0
11	11	11 2400	11 2400	31 2331	24 7913	36 4880	*****	10	0

MAXIMUM DEPTH OF CAST = 39.04M

DEPTH BIN AVERAGED CTD DATA

START TIME 198/10007 POSITION 40 45 05N 52 27 30W STA NO 7100W NO 18 INST NO 3 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M, BOTTOM = 100.0M SURFACE PRES = 1.00DRAR											
BIN NO	DRAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WILD	
1	46	11 5600	11 5600	33 4030	24 6783	36 9310	*****	10	10	0	
2	1 55	11 5600	11 5600	33 4012	24 6822	36 9297	*****	9	9	0	
3	2 55	11 5592	11 5592	33 3865	24 6763	36 9143	*****	9	9	0	
4	3 55	11 5400	11 5400	33 3997	24 6945	36 9110	*****	9	9	0	
5	4 55	11 5400	11 5400	33 3993	24 6986	36 9110	*****	9	9	0	
6	5 55	11 5400	11 5400	33 3989	24 7025	36 9110	*****	9	9	0	
7	6 55	11 5400	11 5400	33 3985	24 7077	36 9110	*****	9	9	0	
8	7 55	11 5400	11 5400	33 3980	24 7126	36 9110	*****	9	9	0	
9	8 55	11 5400	11 5400	33 4291	24 7451	36 9432	*****	9	9	0	
10	9 55	11 5400	11 5400	33 4474	24 7631	36 9623	*****	9	9	0	
11	10 54	11 5400	11 5400	33 4760	24 7890	36 9920	*****	9	9	0	
12	11 51	11 5400	11 5400	33 4854	24 8005	37 1020	*****	9	9	0	
13	12 53	11 5400	11 5400	33 5218	24 8312	37 1197	*****	9	9	0	
14	13 52	11 5400	11 5400	33 5443	24 8551	37 1331	*****	9	9	0	
15	14 59	11 5400	11 5400	33 5572	24 8676	37 1367	*****	9	9	0	
16	15 56	11 5400	11 5400	33 5710	24 8828	37 1392	*****	9	9	0	
17	16 53	11 5400	11 5400	33 5714	24 8906	37 1370	*****	9	9	0	
18	17 53	11 5400	11 5400	33 5700	24 8970	37 1363	*****	9	9	0	
19	18 56	11 5400	11 5400	33 5700	24 9054	37 1318	*****	9	9	0	
20	19 58	11 5400	11 5400	33 5897	24 9156	37 1120	*****	9	9	0	
21	20 54	11 5400	11 5400	33 5893	24 9246	37 1120	*****	9	9	0	
22	21 51	11 5400	11 5400	33 5889	24 9338	37 1120	*****	9	9	0	
23	22 53	11 5400	11 5400	33 5884	24 9354	37 1120	*****	9	9	0	
24	23 55	11 5400	11 5400	33 5880	24 9405	37 1120	*****	9	9	0	
25	24 57	11 5400	11 5400	33 5883	24 9421	37 1127	*****	9	9	0	
26	25 55	11 5400	11 5400	33 5936	24 9504	37 1185	*****	9	9	0	
27	26 53	11 5400	11 5400	33 5999	24 9651	37 1253	*****	9	9	0	
28	27 54	11 5498	11 5498	33 5973	24 9567	37 1320	*****	9	9	0	
29	28 58	11 5418	11 5418	33 6049	24 9810	37 1330	*****	9	9	0	
30	29 58	11 5452	11 5452	33 6016	24 9652	37 1330	*****	9	9	0	
31	30 55	11 5483	11 5483	33 5984	24 9865	37 1330	*****	9	9	0	
32	31 51	11 5515	11 5515	33 5950	24 9893	37 1330	*****	9	9	0	
33	32 54	11 5548	11 5548	33 5918	24 9791	37 1330	*****	9	9	0	
34	33 57	11 5582	11 5582	33 5939	24 9870	37 1386	*****	9	9	0	
35	34 57	11 5600	11 5600	33 6060	24 9951	37 1530	*****	9	9	0	
36	35 59	11 5600	11 5600	33 6056	25 0170	37 1530	*****	9	9	0	
37	36 56	11 5600	11 5600	33 6052	25 0044	37 1530	*****	9	9	0	
38	37 56	11 5600	11 5600	33 6048	25 0098	37 1530	*****	9	9	0	
39	38 57	11 5600	11 5600	33 6044	25 0205	37 1530	*****	9	9	0	
40	39 57	11 5600	11 5600	33 6039	25 0205	37 1530	*****	9	9	0	
41	40 54	11 5600	11 5600	33 6035	25 0242	37 1530	*****	9	9	0	
42	41 50	11 5600	11 5600	33 6031	25 0480	37 1530	*****	9	9	0	
43	42 52	11 5600	11 5600	33 6027	25 0449	37 1530	*****	9	9	0	
44	43 54	11 5600	11 5600	33 6023	25 0276	37 1530	*****	9	9	0	
45	44 56	11 5600	11 5600	33 6017	25 0432	37 1530	*****	9	9	0	
46	45 53	11 5600	11 5600	33 6015	25 0545	37 1530	*****	9	9	0	
47	46 50	11 5600	11 5600	33 6011	25 0519	37 1530	*****	9	9	0	
48	47 52	11 5600	11 5600	33 6007	25 0569	37 1530	*****	9	9	0	

MAXIMUM DEPTH OF CAST = 18.04M

DEPTH BIN AVERAGED STD DATA

START TIME = 19821031 POSITION 30 44 30N 10 27 30W BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRESS = 1.00BAR										
BIN NO	DRAR	FAST-T DEPTH	ACQRT DEPTH	SAL PPT	STGMA-T G/CMKK3	COND MM/CM	VAL ADDED	VAL TOTAL	POTENTIAL	RESIDUAL
1	4000	11 5400	11 5400	32 1254	34 4669	36 6290	*****	0	0	0
2	4000	11 5400	11 5400	32 1250	34 4717	36 6290	*****	0	0	0
3	4000	11 5400	11 5400	32 1107	34 4718	36 6246	*****	0	0	0
4	4000	11 5400	11 5400	32 1168	34 4665	36 6163	*****	0	0	0
5	4000	11 5400	11 5400	32 1270	34 4674	36 6103	*****	0	0	0
6	4000	11 5400	11 5400	32 0989	34 4669	36 6160	*****	0	0	0
7	4000	11 5400	11 5400	32 1017	34 4702	36 6217	*****	0	0	0
8	4000	11 5400	11 5400	32 1046	34 4801	36 6284	*****	0	0	0
9	4000	11 5400	11 5400	32 1048	34 4850	36 6290	*****	0	0	0
10	4000	11 5400	11 5400	32 1043	34 4932	36 6290	*****	0	0	0
11	4000	11 5400	11 5400	32 1040	34 4958	36 6290	*****	0	0	0
12	4000	11 5400	11 5400	32 1036	34 4996	36 6290	*****	0	0	0
13	4000	11 5400	11 5400	32 1031	34 5001	36 6290	*****	0	0	0
14	4000	11 5400	11 5400	32 1027	34 5075	36 6290	*****	0	0	0
15	4000	11 5400	11 5400	32 1023	34 5157	36 6290	*****	0	0	0
16	4000	11 5400	11 5400	32 1019	34 5172	36 6290	*****	0	0	0
17	4000	11 5400	11 5400	32 1015	34 5204	36 6290	*****	0	0	0
18	4000	11 5400	11 5400	32 1011	34 5301	36 6290	*****	0	0	0
19	4000	11 5400	11 5400	32 1007	34 5302	36 6290	*****	0	0	0
20	4000	11 5400	11 5400	32 1003	34 5335	36 6290	*****	0	0	0
21	4000	11 5400	11 5400	32 0999	34 5384	36 6290	*****	0	0	0
22	4000	11 5400	11 5400	32 0995	34 5433	36 6290	*****	0	0	0

MAXIMUM DEPTH OF CAST = 47.0M

DEPTH BIN AVERAGED STD DATA

START TIME = 19821031 POSITION 30 44 30N 10 27 30W BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRESS = 1.00BAR										
BIN NO	DRAR	FAST-T DEPTH	ACQRT DEPTH	SAL PPT	STGMA-T G/CMKK3	COND MM/CM	VAL ADDED	VAL TOTAL	POTENTIAL	RESIDUAL
1	4000	11 5400	11 5400	32 1254	34 4669	36 6290	*****	0	0	0
2	4000	11 5400	11 5400	32 1250	34 4717	36 6290	*****	0	0	0
3	4000	11 5400	11 5400	32 1107	34 4718	36 6246	*****	0	0	0
4	4000	11 5400	11 5400	32 1168	34 4665	36 6163	*****	0	0	0
5	4000	11 5400	11 5400	32 1270	34 4674	36 6103	*****	0	0	0
6	4000	11 5400	11 5400	32 0989	34 4669	36 6160	*****	0	0	0
7	4000	11 5400	11 5400	32 1017	34 4702	36 6217	*****	0	0	0
8	4000	11 5400	11 5400	32 1046	34 4801	36 6284	*****	0	0	0
9	4000	11 5400	11 5400	32 1048	34 4850	36 6290	*****	0	0	0
10	4000	11 5400	11 5400	32 1043	34 4932	36 6290	*****	0	0	0
11	4000	11 5400	11 5400	32 1040	34 4958	36 6290	*****	0	0	0
12	4000	11 5400	11 5400	32 1036	34 4996	36 6290	*****	0	0	0
13	4000	11 5400	11 5400	32 1031	34 5001	36 6290	*****	0	0	0
14	4000	11 5400	11 5400	32 1027	34 5075	36 6290	*****	0	0	0
15	4000	11 5400	11 5400	32 1023	34 5157	36 6290	*****	0	0	0
16	4000	11 5400	11 5400	32 1019	34 5172	36 6290	*****	0	0	0
17	4000	11 5400	11 5400	32 1015	34 5204	36 6290	*****	0	0	0
18	4000	11 5400	11 5400	32 1011	34 5301	36 6290	*****	0	0	0
19	4000	11 5400	11 5400	32 1007	34 5302	36 6290	*****	0	0	0
20	4000	11 5400	11 5400	32 1003	34 5335	36 6290	*****	0	0	0
21	4000	11 5400	11 5400	32 0999	34 5384	36 6290	*****	0	0	0
22	4000	11 5400	11 5400	32 0995	34 5433	36 6290	*****	0	0	0

MAXIMUM DEPTH OF CAST = 22.0M

DEPTH BIN AVERAGED CTD DATA

START TIME = 198/115.7 POSITION = 40 55 12N 75 73W BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR									
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T KG/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED
1	0.0	12.1400	12.1400	31.9986	24.2583	37.0320	*****	10	10
2	0.5	12.1400	12.1400	31.9981	24.2629	37.0320	*****	9	9
3	1.0	12.1400	12.1400	31.9977	24.2681	37.0320	*****	9	9
4	1.5	12.1400	12.1400	31.9973	24.2722	37.0320	*****	9	9
5	2.0	12.1400	12.1400	31.9959	24.2762	37.0320	*****	9	9
6	2.5	12.1400	12.1400	31.9969	24.2835	37.0324	*****	9	9
7	3.0	12.1400	12.1400	31.9991	24.2889	37.0351	*****	9	9
8	3.5	12.1399	12.1399	31.9917	24.2955	37.0381	*****	9	9
9	4.0	12.1337	12.1337	31.9994	24.3074	37.0410	*****	9	9
10	4.5	12.1249	12.1249	31.9914	24.3212	37.0440	*****	9	9
11	5.0	12.1200	12.1200	31.9960	24.3298	37.0469	*****	9	9
12	5.5	12.1200	12.1200	31.9991	24.3409	37.0509	*****	9	9
13	6.0	12.1200	12.1200	31.9991	24.3489	37.0540	*****	9	9
14	6.5	12.1200	12.1200	31.9991	24.3489	37.0540	*****	9	9
15	7.0	12.1200	12.1200	31.9991	24.3546	37.0421	*****	9	9
16	7.5	12.1200	12.1200	31.9991	24.3551	37.0391	*****	9	9
17	8.0	12.1200	12.1200	31.9991	24.3551	37.0391	*****	9	9
18	8.5	12.1200	12.1200	31.9991	24.3551	37.0391	*****	9	9
19	9.0	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
20	9.5	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
21	10.0	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
22	10.5	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
23	11.0	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
24	11.5	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
25	12.0	12.1278	12.1278	31.9991	24.3595	37.0320	*****	9	9
26	12.5	12.1241	12.1241	31.9991	24.3794	37.0320	*****	9	9
27	13.0	12.1212	12.1212	31.9991	24.3913	37.0320	*****	9	9
28	13.5	12.1200	12.1200	31.9991	24.3945	37.0320	*****	9	9
29	14.0	12.1200	12.1200	31.9991	24.4025	37.0320	*****	9	9
30	14.5	12.1200	12.1200	31.9991	24.4135	37.0320	*****	9	9
31	15.0	12.1200	12.1200	31.9991	24.4153	37.0320	*****	9	9
32	15.5	12.1200	12.1200	31.9991	24.4197	37.0320	*****	9	9
33	16.0	12.1200	12.1200	31.9991	24.4153	37.0320	*****	9	9
34	16.5	12.1200	12.1200	31.9991	24.4353	37.0320	*****	9	9
35	17.0	12.1200	12.1200	31.9991	24.4311	37.0320	*****	9	9
36	17.5	12.1200	12.1200	31.9991	24.4309	37.0320	*****	9	9
37	18.0	12.1200	12.1200	31.9991	24.4357	37.0320	*****	9	9
38	18.5	12.1200	12.1200	31.9991	24.4491	37.0320	*****	9	9

MAXIMUM DEPTH OF CAST = 38.02M

DEPTH BY DEPTH AVERAGED DATA

START TIME 198712287 POSITION 40 59 50N 119 57 00W SURF NO 710W SURF 38 SURF NO 1195700 SURF SIZE = 1.0M DEPTHS TOP 1.0M BOTTOM 119.0M SURFACE PRESS = 1.01454										
STN NO	DEAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T KG/CM3	COND MMH/M	SP 1000	WIND M/S	WIND DIR	WIND SPEED
13	4800	12	4800	31	8057	24	1330	*****	10	10
14	4800	12	4800	31	8053	24	1330	*****	10	10
15	4733	12	4733	31	8061	24	1330	*****	10	10
16	4400	12	4400	31	8093	24	1330	*****	10	10
17	4400	12	4400	31	8179	24	1330	*****	10	10
18	4400	12	4400	31	8173	24	1330	*****	10	10
19	4400	12	4400	31	8173	24	1330	*****	10	10
20	4400	12	4400	31	8173	24	1330	*****	10	10
21	4400	12	4400	31	8173	24	1330	*****	10	10
22	4400	12	4400	31	8173	24	1330	*****	10	10
23	4400	12	4400	31	8173	24	1330	*****	10	10
24	4400	12	4400	31	8173	24	1330	*****	10	10
25	4400	12	4400	31	8173	24	1330	*****	10	10
26	4200	12	4200	31	8306	24	1330	*****	10	10
27	4200	12	4200	31	8306	24	1330	*****	10	10
28	4200	12	4200	31	8306	24	1330	*****	10	10
29	4200	12	4200	31	8306	24	1330	*****	10	10
30	4200	12	4200	31	8306	24	1330	*****	10	10
31	4200	12	4200	31	8306	24	1330	*****	10	10
32	4200	12	4200	31	8306	24	1330	*****	10	10
33	4200	12	4200	31	8306	24	1330	*****	10	10
34	4200	12	4200	31	8306	24	1330	*****	10	10
35	4200	12	4200	31	8306	24	1330	*****	10	10
36	4198	12	4198	31	8308	24	1330	*****	10	10
37	4174	12	4174	31	8305	24	1330	*****	10	10
38	4145	12	4145	31	8305	24	1330	*****	10	10
39	4115	12	4115	31	8327	24	1330	*****	10	10
40	4086	12	4086	31	8347	24	1330	*****	10	10
41	4058	12	4058	31	8367	24	1330	*****	10	10
42	4030	12	4030	31	8387	24	1330	*****	10	10
43	4003	12	4003	31	8406	24	1330	*****	10	10
44	4000	12	4000	31	8404	24	1330	*****	10	10
45	4000	12	4000	31	8400	24	1330	*****	10	10
46	4000	12	4000	31	8396	24	1330	*****	10	10
47	4000	12	4000	31	8393	24	1330	*****	10	10
48	4000	12	4000	31	8389	24	1330	*****	10	10

MAXIMUM DEPTH OF CAST = 38.02M

GRAIN BULK ANALYSIS REPORT

START TIME = 19871500Z POS TION 4 4 4 4 4 4 4 4 4 4 4 4											
BIN NO = 1 2 3 4 5 6 7 8 9 10 11 12											
BIN SIZE = 1.0M DEPTH = 0.0M SURFACE PRESS = 0.0M											
BIN NO	DEAR	FIST-T	ACCR-T	SHL	STAMA-T	COND	DEL	WGT. PRINT TO ROW			
		DEG-C	DEG-C	PPT	CHAKS	MM/CM	MS/CC				
1	4	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
2	1	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
3	2	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
4	3	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
5	4	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
6	5	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
7	6	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
8	7	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
9	8	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
10	9	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
11	10	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
12	11	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
13	12	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
14	13	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
15	14	13 2600	13 2600	31 5075	33 7413	37 5150	*****	10	10	0	
16	15	13 2473	13 2473	31 5075	33 7413	37 5150	*****	10	10	0	
17	16	13 2473	13 2473	31 5075	33 7413	37 5150	*****	10	10	0	
18	17	13 2473	13 2473	31 5075	33 7413	37 5150	*****	10	10	0	
19	18	13 2473	13 2473	31 5075	33 7413	37 5150	*****	10	10	0	
20	19	13 2473	13 2473	31 5075	33 7413	37 5150	*****	10	10	0	
21	20	13 1600	13 1600	31 5075	33 7413	37 5150	*****	10	10	0	

MAXIMUM DEPTH OF CAST = 21.0M



DEPTH BIN AVERAGED CTD DATA

START TIME = 1984/19527 POSITION 40 30 59N 69 27 12W STA NO = 710W NO 34 IN-T NO 3 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.00DEAR											
BIN NO	DBAR	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T KG/CM3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/ USED	WILD	
1	4.000	12 7000	12 7000	32 5390	24 5697	38 1000	*****	10	10	0	
2	4.000	12 7000	12 7000	32 5386	24 5745	38 1000	*****	9	9	0	
3	4.000	12 6967	12 6967	32 5484	24 5852	38 1261	*****	9	9	0	
4	4.000	12 6944	12 6944	32 5525	24 5893	37 5159	*****	9	9	0	
5	4.000	11 9128	11 9128	32 5360	24 5697	37 3864	*****	9	9	0	
6	5.000	11 8621	11 8621	32 5738	24 7904	37 3801	*****	9	9	0	
7	5.000	11 8456	11 8456	32 5942	24 8047	37 3867	*****	9	9	0	
8	5.000	11 7947	11 7947	32 6057	24 8295	37 3540	*****	9	9	0	
9	5.000	11 7600	11 7600	32 6173	24 8446	37 3340	*****	9	9	0	
10	5.000	11 7500	11 7500	32 6169	24 8531	37 3340	*****	9	9	0	
11	10.000	11 7500	11 7500	32 6165	24 8549	37 3340	*****	9	9	0	
12	10.000	11 7596	11 7596	32 6164	24 8644	37 3340	*****	9	9	0	
13	10.000	11 7421	11 7421	32 6314	24 8788	37 3340	*****	9	9	0	
14	10.000	11 7400	11 7400	32 6358	24 8849	37 3340	*****	9	9	0	
15	10.000	11 7400	11 7400	32 6324	24 8934	37 3340	*****	9	9	0	
16	15.000	11 7400	11 7400	32 6320	24 9009	37 3340	*****	9	9	0	
17	15.000	11 7400	11 7400	32 6316	24 9080	37 3340	*****	9	9	0	
18	15.000	11 7400	11 7400	32 6313	24 9104	37 3340	*****	9	9	0	
19	15.000	11 7400	11 7400	32 6308	24 9098	37 3340	*****	9	9	0	
20	15.000	11 7400	11 7400	32 6304	24 9096	37 3340	*****	9	9	0	
21	20.000	11 7362	11 7362	32 6333	24 9232	37 3340	*****	9	9	0	
22	20.000	11 7200	11 7200	32 6471	24 9404	37 3340	*****	9	9	0	
23	20.000	11 7200	11 7200	32 6467	24 9456	37 3340	*****	9	9	0	
24	20.000	11 7200	11 7200	32 6465	24 9427	37 3340	*****	9	9	0	
25	20.000	11 7200	11 7200	32 6459	24 9650	37 3340	*****	9	9	0	
26	25.000	11 7200	11 7200	32 6455	24 9680	37 3340	*****	9	9	0	
27	25.000	11 7200	11 7200	32 6451	24 9638	37 3340	*****	9	9	0	
28	25.000	11 7200	11 7200	32 6447	24 9598	37 3340	*****	9	9	0	
29	25.000	11 7200	11 7200	32 6443	24 9688	37 3340	*****	9	9	0	
30	25.000	11 7200	11 7200	32 6438	24 9754	37 3340	*****	9	9	0	
31	30.000	11 7200	11 7200	32 6434	24 9834	37 3340	*****	9	9	0	
32	30.000	11 7155	11 7155	32 6470	24 9858	37 3340	*****	9	9	0	
33	30.000	11 7000	11 7000	32 6602	25 0143	37 3340	*****	9	9	0	
34	30.000	11 6889	11 6889	32 6696	25 0253	37 3340	*****	9	9	0	
35	30.000	11 6800	11 6800	32 6770	25 0363	37 3340	*****	9	9	0	
36	35.000	11 6800	11 6800	32 6766	25 0360	37 3340	*****	9	9	0	
37	35.000	11 6743	11 6743	32 6812	25 0394	37 3340	*****	9	9	0	
38	35.000	11 6597	11 6597	32 6932	25 0686	37 3340	*****	9	9	0	
39	35.000	11 6447	11 6447	32 7065	25 0806	37 3340	*****	9	9	0	
40	35.000	11 6465	11 6465	32 7045	25 0804	37 3340	*****	9	9	0	
41	40.000	11 6392	11 6392	32 7105	25 0858	37 3340	*****	9	9	0	
42	40.000	11 6200	11 6200	32 7271	25 1043	37 3340	*****	9	9	0	
43	40.000	11 6200	11 6200	32 7267	25 1040	37 3340	*****	9	9	0	
44	40.000	11 6154	11 6154	32 7303	25 1316	37 3340	*****	9	9	0	
45	40.000	11 6009	11 6009	32 7427	25 1583	37 3340	*****	9	9	0	
46	45.000	11 5843	11 5843	32 7570	25 1761	37 3340	*****	9	9	0	
47	45.000	11 5660	11 5660	32 7710	25 1954	37 3340	*****	9	9	0	
48	45.000	11 5600	11 5600	32 7761	25 2188	37 3340	*****	9	9	0	
49	45.000	11 5600	11 5600	32 7791	25 1851	37 3340	*****	9	9	0	
50	45.000	11 5600	11 5600	32 7641	25 2249	37 3340	*****	9	9	0	
51	50.000	11 5600	11 5600	32 7583	25 1998	37 3155	*****	9	9	0	
52	50.000	11 5600	11 5600	32 7565	25 2181	37 3140	*****	9	9	0	
53	50.000	11 5600	11 5600	32 7561	25 2033	37 3140	*****	9	9	0	

MAXIMUM DEPTH OF CAST = 53.0M

DEPTH BIN AVERAGED STD DATA

START TIME = 19820157Z POSITION 40 40 44N 27 10 97W STA NO 7130W NO 35 INST NO 2 TAPE NO 1 BIN SIZE = 1.0M DEPTHS TOP = 1.8M BOTTOM = 100.0M SURFACE PRESS = 1.00BAR												
BIN NO	DEAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	STEMA-T G/CM**3	COND MM/M	VEL M/SEC	NO TOTAL	NO USED	NO WILD		
1	2 68	18 3671	18 3671	33 2182	23 8520	44 1583	79	8	7	0		
2	3 39	18 3482	18 3482	33 2161	23 8577	44 1379	57	57	51	0		
3	4 17	18 3113	18 3113	33 2174	23 8718	44 1043	21	146	93	0		
4	5 35	18 2136	18 2136	33 2125	23 8978	44 0051	11	293	50	1		
5	6 31	18 1666	18 1666	33 2202	23 9202	43 9694	18	171	102	0		
6	7 29	17 9591	17 9591	33 1980	23 9576	43 7446	58	52	43	0		
7	8 37	17 5119	17 5119	33 2045	24 0772	43 3246	46	59	34	0		
8	9 33	17 3822	17 3822	33 2355	24 1357	43 2371	34	39	27	0		
9	10 30	17 2688	17 2688	33 2328	24 1669	43 1241	24	48	38	0		
10	11 36	17 0790	17 0790	33 2358	24 2179	42 9487	38	81	27	0		
11	12 38	16 9028	16 9028	33 2394	24 2669	42 7852	49	53	48	0		
12	13 32	16 4169	16 4169	33 2157	24 3632	42 2967	32	52	48	0		
13	14 34	16 3255	16 3255	33 2211	24 3899	41 3154	34	53	48	0		
14	15 39	16 2688	16 2688	33 2844	24 6836	41 2082	58	53	48	0		
15	16 34	16 1911	16 1911	33 3000	24 7391	41 1472	52	59	53	0		
16	17 27	14 8809	14 8809	33 3080	24 7987	40 9497	43	74	61	1		
17	18 31	14 2703	14 2703	33 3012	24 8424	40 7399	55	57	52	0		
18	19 37	14 2330	14 2330	33 3253	24 8937	40 5195	50	50	53	0		
19	20 37	14 2330	14 2330	33 3253	24 8937	40 5195	50	50	53	0		
20	21 29	13 0197	13 0197	33 2480	25 1570	39 9697	66	45	45	0		
21	22 33	12 4446	12 4446	33 4032	25 3940	38 7384	55	56	51	0		
22	23 33	12 3404	12 3404	33 4460	25 4712	38 6340	31	99	56	0		
23	24 38	12 0835	12 0835	33 4793	25 5314	38 5236	69	45	56	0		
24	25 38	12 0228	12 0228	33 5129	25 5718	38 5825	56	55	50	0		
25	26 30	11 9980	11 9980	33 5205	25 5871	38 4878	34	68	58	0		
26	27 28	11 9515	11 9515	33 5276	25 6071	38 4524	46	59	53	0		
27	28 30	11 9370	11 9370	33 5371	25 6259	38 4455	60	53	47	0		
28	29 33	11 8960	11 8960	33 6404	25 6355	38 4151	59	51	45	0		
29	30 31	11 8520	11 8520	33 6497	25 6572	38 3843	43	72	45	0		
30	31 25	11 8208	11 8208	33 5608	25 6795	38 3672	38	85	70	0		
31	32 28	11 7864	11 7864	33 5664	25 6949	38 3415	60	59	41	0		
32	33 33	11 7440	11 7440	33 5794	25 7163	38 3160	63	49	46	0		
33	34 34	11 7017	11 7017	33 5885	25 7338	38 2867	49	55	37	0		
34	35 31	11 6337	11 6337	33 5994	25 7641	38 2352	46	57	38	0		
35	36 32	11 5685	11 5685	33 6178	25 7909	38 1940	49	54	49	0		
36	37 30	11 5380	11 5380	33 6355	25 8193	38 1842	55	56	48	0		
37	38 31	11 5242	11 5242	33 6415	25 8293	38 1780	57	54	48	0		
38	39 34	11 5203	11 5203	33 6455	25 8394	38 1791	50	59	54	0		
39	40 31	11 5163	11 5163	33 6335	25 8483	38 1840	46	59	54	0		
40	41 32	11 5153	11 5153	33 6573	25 8583	38 1872	56	48	45	0		
41	42 34	11 5153	11 5153	33 6574	25 8654	38 1876	58	52	39	0		
42	43 32	11 5150	11 5150	33 6638	25 8776	38 1943	36	46	45	0		
43	44 35	11 5149	11 5149	33 6646	25 8787	38 1953	59	50	45	0		
44	45 31	11 5146	11 5146	33 6696	25 8849	38 2007	81	39	36	0		
45	46 36	11 5134	11 5134	33 6776	25 9016	38 2043	63	49	44	0		
46	47 26	11 5139	11 5139	33 6777	25 9007	38 2092	28	111	74	0		
47	48 29	11 5141	11 5141	33 6779	25 9146	38 2100	79	59	57	0		
48	49 32	11 5140	11 5140	33 6778	25 9226	38 2102	91	34	33	0		
49	50 28	11 5144	11 5144	33 6781	25 9152	38 2113	21	62	45	0		
50	51 27	11 5145	11 5145	33 6780	25 9250	38 2117	29	107	76	0		
51	52 26	11 5144	11 5144	33 6777	25 9294	38 2117	72	43	39	0		
52	53 34	11 5145	11 5145	33 6775	25 9331	38 2121	77	40	38	0		
53	54 34	11 5149	11 5149	33 6776	25 9400	38 2130	57	45	46	0		
54	55 37	11 5149	11 5149	33 6771	25 9462	38 2129	37	87	25	0		
55	56 39	11 5149	11 5149	33 6775	25 9486	38 2138	27	115	85	0		
56	57 33	11 5151	11 5151	33 6772	25 9521	38 2140	15	208	72	0		
57	58 33	11 5149	11 5149	33 6772	25 9541	38 2143	20	156	117	0		
58	59 31	11 5150	11 5150	33 6771	25 9528	38 2146	45	550	95	0		
59	60 35	11 5141	11 5141	33 6769	25 9580	38 2141	17	177	95	0		
60	61 38	11 5142	11 5142	33 6770	25 9643	38 2148	19	314	134	0		

MAXIMUM DEPTH OF CAST = 61.0M

DEPTH FROM AVERAGED STD DATA

START TIME 200.14.17 POSITION 49 50 30N 17 21W STA NO 7 CUM NO 2 INST NO 1 TIME NO 1 BTN SIZE = 1.0M DEPTHS TOP = 0M BOTTOM = 100.0M SURFACE PRESS = 1.00BAR											
RIN NO	DEAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	STOMA-T DEG-C	COND MM/M	VEL M/SEC	NO THERM	NO PNEUM	RIN WELD	
1	05	14	1544	32	2849	34	2371	39	2110	43	50
2	1	06	13	1544	33	2852	34	2371	39	444	44
3	2	08	13	1185	33	1194	34	2461	39	0961	36
4	3	05	12	2344	33	1888	35	0645	38	7932	26
5	4	74	12	4199	33	1835	35	1427	38	5195	56
6	5	76	12	2121	33	2326	35	2250	38	1795	41
7	6	28	12	0956	33	2399	35	2575	38	2802	35
8	7	74	11	9145	33	2650	35	3168	38	1400	29
9	8	75	11	8985	33	2978	35	3420	38	1491	38
10	9	67	11	8469	33	2803	35	3504	38	0944	66
11	10	72	11	7907	33	2888	35	3706	38	0519	86
12	11	73	11	7796	33	2943	35	3840	38	0498	49
13	12	05	11	7733	33	2990	35	3940	38	0475	48
14	13	71	11	7675	33	3020	35	3993	38	0453	27
15	14	75	11	7698	33	3021	35	4055	38	0430	47
16	15	69	11	7629	33	3057	35	4149	38	0457	58
17	16	73	11	7565	33	3090	35	4237	38	0436	33
18	17	78	11	7544	33	3108	35	4327	38	0440	43
19	18	63	11	7487	33	3186	35	4415	38	0398	54
20	19	70	11	7351	33	3224	35	4538	38	0391	96
21	20	73	11	7329	33	3240	35	4557	38	0391	88
22	21	73	11	7315	33	3248	35	4635	38	0391	58
23	22	69	11	7303	33	3263	35	4688	38	0399	23
24	23	70	11	7242	33	3315	35	4676	38	0401	72
25	24	73	11	7227	33	3331	35	4680	38	0407	25
26	25	73	11	7195	33	3362	35	4979	38	0413	82
27	26	68	11	7192	33	3367	35	5007	38	0429	81
28	27	74	11	7179	33	3382	35	5026	38	0427	86
29	28	72	11	7170	33	3390	35	5122	38	0431	74
30	29	78	11	7088	33	3491	35	5271	38	0465	51
31	30	68	11	7080	33	3492	35	5350	38	0462	50
32	31	67	11	7080	33	3493	35	5432	38	0467	33
33	32	69	11	7076	33	3499	35	5488	38	0474	33
34	33	72	11	7079	33	3497	35	5489	38	0479	26
35	34	76	11	7084	33	3497	35	5519	38	0489	55
36	35	68	11	7073	33	3518	35	5561	38	0501	45
37	36	67	11	7069	33	3513	35	5615	38	0501	77
38	37	68	11	7072	33	3513	35	5686	38	0506	33
39	38	75	11	7071	33	3519	35	5722	38	0516	74
40	39	73	11	7076	33	3514	35	5743	38	0520	60
41	40	71	11	7072	33	3520	35	5761	38	0526	76
42	41	71	11	7065	33	3531	35	5875	38	0535	70
43	42	71	11	7059	33	3537	35	5942	38	0540	48
44	43	68	11	7053	33	3546	35	5995	38	0547	72
45	44	73	11	7049	33	3547	35	5975	38	0550	49
46	45	75	11	7058	33	3538	35	6031	38	0554	27
47	46	65	11	7072	33	3523	35	6104	38	0555	44
48	47	71	11	7071	33	3522	35	6196	38	0557	29
49	48	73	11	7061	33	3541	35	6178	38	0573	33
50	49	72	11	7051	33	3560	35	6212	38	0587	65
51	50	67	11	7035	33	3588	35	6363	38	0604	25
52	51	72	11	7030	33	3594	35	6382	38	0611	27
53	52	69	11	7022	33	3607	35	6476	38	0621	23
54	53	71	11	7023	33	3607	35	6456	38	0625	43
55	54	75	11	7015	33	3623	35	6649	38	0639	49
56	55	73	11	7034	33	3603	35	6672	38	0641	38
57	56	72	11	7026	33	3610	35	6749	38	0645	31
58	57	74	11	7021	33	3618	35	6756	38	0653	31
59	58	75	11	7020	33	3623	35	6834	38	0660	30
60	59	75	11	7035	33	3610	35	6786	38	0666	44
61	60	72	11	7025	33	3617	35	6901	38	0667	24
62	61	78	11	6986	33	3652	35	6923	38	0672	24
63	62	69	11	6993	33	3658	35	6948	38	0680	42
64	63	72	11	6983	33	3653	35	7005	38	0679	51
65	64	70	11	6986	33	3660	35	7152	38	0692	24
66	65	68	11	6978	33	3652	35	7212	38	0692	33
67	66	65	11	6989	33	3653	35	7186	38	0699	23
68	67	65	11	6991	33	3653	35	7261	38	0703	42
69	68	70	11	6988	33	3653	35	7265	38	0706	51

MAXIMUM DEPTH OF CAST = 69.21M

DEPTH BIN AVERAGED CTD DATA

START TIME = 200 0735 POSITION 40 45 42N 124 30 10W STA NO 900 DEPTH TOP 0.0M BOTTOM 114.0M SURFACE PRES = 1.00BAR BIN SIZE = 1.0M										
RUN NO	DEPT M	FAST-T DEPTH	ADP-R-T DEPTH	SAL	SIGMA-T 2700000	COND MU/CM	VEL M/SEC	NO. TOTAL	POINTS USED	REMARKS
1	39	11 44.0	11 44.0	35 3734	34 3593	37 48.34	36	209	33	
2	38	11 43.5	11 43.5	35 3734	34 3593	37 48.34	36	209	33	
3	37	11 43.0	11 43.0	35 3734	34 3593	37 48.34	36	209	33	
4	36	11 42.5	11 42.5	35 3734	34 3593	37 48.34	36	209	33	
5	35	11 42.0	11 42.0	35 3734	34 3593	37 48.34	36	209	33	
6	34	11 41.5	11 41.5	35 3734	34 3593	37 48.34	36	209	33	
7	33	11 41.0	11 41.0	35 3734	34 3593	37 48.34	36	209	33	
8	32	11 40.5	11 40.5	35 3734	34 3593	37 48.34	36	209	33	
9	31	11 40.0	11 40.0	35 3734	34 3593	37 48.34	36	209	33	
10	30	11 39.5	11 39.5	35 3734	34 3593	37 48.34	36	209	33	
11	29	11 39.0	11 39.0	35 3734	34 3593	37 48.34	36	209	33	
12	28	11 38.5	11 38.5	35 3734	34 3593	37 48.34	36	209	33	
13	27	11 38.0	11 38.0	35 3734	34 3593	37 48.34	36	209	33	
14	26	11 37.5	11 37.5	35 3734	34 3593	37 48.34	36	209	33	
15	25	11 37.0	11 37.0	35 3734	34 3593	37 48.34	36	209	33	
16	24	11 36.5	11 36.5	35 3734	34 3593	37 48.34	36	209	33	
17	23	11 36.0	11 36.0	35 3734	34 3593	37 48.34	36	209	33	
18	22	11 35.5	11 35.5	35 3734	34 3593	37 48.34	36	209	33	
19	21	11 35.0	11 35.0	35 3734	34 3593	37 48.34	36	209	33	
20	20	11 34.5	11 34.5	35 3734	34 3593	37 48.34	36	209	33	
21	19	11 34.0	11 34.0	35 3734	34 3593	37 48.34	36	209	33	
22	18	11 33.5	11 33.5	35 3734	34 3593	37 48.34	36	209	33	
23	17	11 33.0	11 33.0	35 3734	34 3593	37 48.34	36	209	33	
24	16	11 32.5	11 32.5	35 3734	34 3593	37 48.34	36	209	33	
25	15	11 32.0	11 32.0	35 3734	34 3593	37 48.34	36	209	33	
26	14	11 31.5	11 31.5	35 3734	34 3593	37 48.34	36	209	33	
27	13	11 31.0	11 31.0	35 3734	34 3593	37 48.34	36	209	33	
28	12	11 30.5	11 30.5	35 3734	34 3593	37 48.34	36	209	33	
29	11	11 30.0	11 30.0	35 3734	34 3593	37 48.34	36	209	33	
30	10	11 29.5	11 29.5	35 3734	34 3593	37 48.34	36	209	33	
31	9	11 29.0	11 29.0	35 3734	34 3593	37 48.34	36	209	33	
32	8	11 28.5	11 28.5	35 3734	34 3593	37 48.34	36	209	33	
33	7	11 28.0	11 28.0	35 3734	34 3593	37 48.34	36	209	33	
34	6	11 27.5	11 27.5	35 3734	34 3593	37 48.34	36	209	33	
35	5	11 27.0	11 27.0	35 3734	34 3593	37 48.34	36	209	33	
36	4	11 26.5	11 26.5	35 3734	34 3593	37 48.34	36	209	33	
37	3	11 26.0	11 26.0	35 3734	34 3593	37 48.34	36	209	33	
38	2	11 25.5	11 25.5	35 3734	34 3593	37 48.34	36	209	33	
39	1	11 25.0	11 25.0	35 3734	34 3593	37 48.34	36	209	33	
40	0	11 24.5	11 24.5	35 3734	34 3593	37 48.34	36	209	33	

MAXIMUM DEPTH OF CAST = 36.0M





DEPTH RUN AVERAGED CTD DATA

START TIME 20111645Z POSITION 40 59 14N 07 13 19W STA NO 7101 HW NO 40 INST NO 2 TPE NO 1 WIN SIZE = 1.0M DEPTHs TOP = 0M BOTTOM = 10.0M SURFACE PRES = 1.00BAR											
RUN NO	DEAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM3	COND MM/CM	VELOCITY M/SEC	NO TOTAL	POINTS USED	SPRINT	WILD
1	1 50	11 7059	11 7059	32 1705	24 4767	36 3234	10	63	15	0	
2	2 10	11 6819	11 6819	32 1626	24 4774	36 3041	10	108	15	0	
3	3 98	11 6024	11 6024	32 1669	24 5002	36 2795	10	138	15	0	
4	4 14	11 5788	11 5788	32 1688	24 5109	36 2705	10	35	15	0	
5	5 15	11 5749	11 5749	32 1728	24 5203	36 2756	10	124	15	0	
6	6 10	11 5328	11 5328	32 1648	24 5259	36 2653	10	64	15	0	
7	7 13	11 4991	11 4991	32 1681	24 5394	36 2632	10	50	15	0	
8	8 09	11 4708	11 4708	32 1590	24 5495	36 2605	10	45	15	0	
9	9 10	11 3828	11 3828	32 1715	24 5900	36 2603	10	10	15	0	
10	10 04	11 3594	11 3594	32 1726	24 6138	36 2615	10	25	15	0	
11	11 08	11 3422	11 3422	32 2268	24 6347	36 2611	10	43	15	0	
12	12 18	11 3342	11 3342	32 2367	24 6475	36 2645	10	59	15	0	
13	13 05	11 3181	11 3181	32 2548	24 6695	36 2683	10	103	15	0	
14	14 13	11 3133	11 3133	32 2701	24 6861	36 2705	10	51	15	0	
15	15 11	11 3033	11 3033	32 2986	24 7152	36 2681	10	54	15	0	
16	16 12	11 2934	11 2934	32 3480	24 7579	36 2429	10	54	15	0	
17	17 12	11 2941	11 2941	32 3573	24 7739	36 2536	10	104	15	0	
18	18 06	11 3005	11 3005	32 3769	24 7923	36 2574	10	142	15	0	
19	19 12	11 3068	11 3068	32 4130	24 8110	36 2641	10	20	15	0	
20	20 13	11 3109	11 3109	32 4130	24 8250	36 2765	10	40	15	0	
21	21 07	11 3150	11 3150	32 4215	24 8363	36 2793	10	89	15	0	
22	22 07	11 3187	11 3187	32 4280	24 8475	36 2807	10	55	15	0	
23	23 14	11 3213	11 3213	32 4416	24 8609	36 2851	10	79	15	0	
24	24 13	11 3234	11 3234	32 4472	24 8733	36 2741	10	33	15	0	
25	25 09	11 3233	11 3233	32 4420	24 8684	36 2691	10	60	15	0	
26	26 10	11 3268	11 3268	32 4501	24 8836	36 2810	10	78	15	0	
27	27 09	11 3289	11 3289	32 4568	24 8914	36 2901	10	59	15	0	
28	28 17	11 3303	11 3303	32 4564	24 8960	36 2914	10	58	15	0	
29	29 07	11 3322	11 3322	32 4626	24 9083	36 3121	10	118	15	0	
30	30 09	11 3607	11 3607	32 4959	24 9382	36 3596	10	77	15	0	
31	31 29	11 3613	11 3613	32 4947	24 9373	36 3594	10	85	15	0	
32	32 07	11 4123	11 4123	32 5588	24 9795	36 3789	10	3424	15	0	
33	33 13	11 4267	11 4267	32 5269	25 0113	37 0231	10	29	15	0	
34	34 07	11 4650	11 4650	32 5480	25 0444	37 1102	10	49	15	0	
35	35 19	11 4880	11 4880	32 6892	25 0790	37 1734	10	42	15	0	
36	36 00	11 4918	11 4918	32 7032	25 0947	37 1915	10	35	15	0	
37	37 17	11 4871	11 4871	32 7243	25 1288	37 2143	10	52	15	0	
38	38 09	11 4890	11 4890	32 7346	25 1329	37 2217	10	28	15	0	
39	39 09	11 4862	11 4862	32 7573	25 1551	37 2373	10	77	15	0	
40	40 20	11 4802	11 4802	32 7571	25 1636	37 2377	10	153	15	0	
41	41 11	11 4666	11 4666	32 7791	25 1766	37 2491	10	81	15	0	
42	42 13	11 4497	11 4497	32 7859	25 2017	37 2400	10	80	15	0	
43	43 13	11 4334	11 4334	32 7894	25 2056	37 2355	10	32	15	0	
44	44 12	11 3788	11 3788	32 7909	25 2269	37 1822	10	45	15	0	
45	45 11	11 3456	11 3456	32 7955	25 2457	37 1582	10	35	15	0	
46	46 09	11 3360	11 3360	32 8011	25 2493	37 1546	10	73	15	0	
47	47 03	11 3304	11 3304	32 8005	25 2579	37 1495	10	48	15	0	
48	48 04	11 3139	11 3139	32 8058	25 2639	37 1402	10	29	15	0	
49	49 14	11 3046	11 3046	32 8095	25 2725	37 1360	10	38	15	0	
50	50 19	11 3067	11 3067	32 8090	25 2820	37 1328	10	59	15	0	
51	51 03	11 3031	11 3031	32 8117	25 2874	37 1378	10	108	15	0	
52	52 10	11 3054	11 3054	32 8115	25 2881	37 1401	10	71	15	0	
53	53 15	11 2973	11 2973	32 8159	25 3045	37 1346	10	58	15	0	
54	54 05	11 2921	11 2921	32 8115	25 3126	37 1389	10	38	15	0	
55	55 18	11 2907	11 2907	32 8152	25 3194	37 1412	10	53	15	0	
56	56 11	11 2900	11 2900	32 8251	25 3310	37 1416	10	35	15	0	
57	57 08	11 2903	11 2903	32 8253	25 3327	37 1410	10	10	15	0	
58	58 12	11 2901	11 2901	32 8253	25 3327	37 1408	10	15	15	0	
59	59 10	11 2900	11 2900	32 8253	25 3325	37 1445	10	10	15	0	
60	60 11	11 2900	11 2900	32 8258	25 3482	37 1451	10	28	15	0	
61	61 15	11 2901	11 2901	32 8272	25 3515	37 1460	10	72	15	0	
62	62 11	11 2908	11 2908	32 8291	25 3555	37 1448	10	51	15	0	
63	63 11	11 2913	11 2913	32 8317	25 3723	37 1529	10	31	15	0	
64	64 10	11 2914	11 2914	32 8322	25 3772	37 1532	10	10	15	0	
65	65 12	11 2905	11 2905	32 8327	25 3802	37 1537	10	36	15	0	
66	66 05	11 2900	11 2900	32 8331	25 3852	37 1516	10	30	15	0	
67	67 14	11 2903	11 2903	32 8329	25 3851	37 1545	10	40	15	0	

MAXIMUM DEPTH OF CAST = 67.0M

DEPTH BIN AVERAGED CTD DATA

START TIME = 202/0130Z POSITION = 41 59 12 SW INST NO = 41 SURF = 100 M BIN SIZE = 1.0M DEPTHS TOP = 2M BOTTOM = 100.0M SURFACE PRES = 1.00BAR										
BIN NO	DBAR	EAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM <sup>3</sup>	COND MM/CM	VEL M/SEC	TOTAL	POLYMER/BIN USED	WILD
1	98	10 7631	10 7631	32 0563	24 5535	35 8710	58	23	20	0
2	99	10 7493	10 7493	32 0604	24 5636	35 8634	58	94	40	0
3	100	10 7465	10 7465	32 0637	24 5639	35 8645	57	76	40	0
4	101	10 7489	10 7489	32 0635	24 5744	35 8669	59	80	27	0
5	102	10 7514	10 7514	32 0601	24 5769	35 8661	45	34	34	0
6	103	10 7531	10 7531	32 0602	24 5818	35 8681	74	32	31	0
7	104	10 7624	10 7624	32 0513	24 5767	35 8739	35	87	28	0
8	105	10 7653	10 7653	32 0519	24 5835	35 8711	93	33	29	0
9	106	10 7630	10 7630	32 0549	24 5968	35 8680	1 19	66	25	0
10	107	10 7514	10 7514	32 0590	24 6013	35 8671	40	35	25	0
11	108	10 7382	10 7382	32 0652	24 6117	35 8621	53	57	48	0
12	109	10 7355	10 7355	32 0620	24 6170	35 8619	66	48	46	0
13	110	10 7371	10 7371	32 0637	24 6254	35 8627	1 87	29	28	0
14	111	10 7362	10 7362	32 0637	24 6271	35 8621	1 99	27	27	0
15	112	10 7317	10 7317	32 0672	24 6351	35 8601	64	32	29	0
16	113	10 7356	10 7356	32 0670	24 6377	35 8637	41	75	67	0
17	114	10 7303	10 7303	32 0681	24 6426	35 8606	58	36	33	0
18	115	10 7299	10 7299	32 0687	24 6490	35 8615	1 19	36	26	0
19	116	10 7299	10 7299	32 0690	24 6534	35 8628	1 14	27	27	0
20	117	10 7299	10 7299	32 0670	24 6586	35 8603	73	44	37	0
21	118	10 7309	10 7309	32 0691	24 6637	35 8638	55	58	54	0
22	119	10 7243	10 7243	32 0709	24 6736	35 8600	94	36	35	0
23	120	10 7235	10 7235	32 0715	24 6765	35 8604	99	35	35	0
24	121	10 7219	10 7219	32 0715	24 6848	35 8595	56	35	35	0
25	122	10 7213	10 7213	32 0736	24 6904	35 8615	58	35	49	0
26	123	10 7185	10 7185	32 0755	24 6936	35 8612	66	48	43	0
27	124	10 7206	10 7206	32 0749	24 7024	35 8630	1 06	39	38	0
28	125	10 7241	10 7241	32 0736	24 7052	35 8652	1 20	25	25	0
29	126	10 7161	10 7161	32 0760	24 7088	35 8619	1 12	29	29	0
30	127	10 7103	10 7103	32 0765	24 7197	35 8589	1 49	21	49	0
31	128	10 7123	10 7123	32 0784	24 7217	35 8608	49	65	52	0
32	129	10 7085	10 7085	32 0790	24 7316	35 8585	1 50	20	20	0
33	130	10 7116	10 7116	32 0777	24 7354	35 8605	1 02	19	19	0
34	131	10 7067	10 7067	32 0800	24 7447	35 8588	1 32	24	24	0
35	132	10 7134	10 7134	32 0787	24 7433	35 8638	32	26	65	0
36	133	10 7156	10 7156	32 0767	24 7431	35 8642	83	37	35	0
37	134	10 7175	10 7175	32 0764	24 7494	35 8659	1 06	29	27	0
38	135	10 7194	10 7194	32 0755	24 7594	35 8682	32	100	68	0
39	136	10 7140	10 7140	32 0775	24 7651	35 8647	24	48	42	0
40	137	10 7106	10 7106	32 0787	24 7732	35 8633	96	32	30	0
41	138	10 7111	10 7111	32 0788	24 7728	35 8643	23	35	49	0
42	139	10 7070	10 7070	32 0797	24 7764	35 8621	1 03	30	29	0
43	140	10 7093	10 7093	32 0785	24 7788	35 8634	1 17	27	25	0
44	141	10 7115	10 7115	32 0791	24 7919	35 8663	66	47	42	0
45	142	10 7077	10 7077	32 0797	24 7981	35 8639	24	127	45	0
46	143	10 7040	10 7040	32 0811	24 7952	35 8624	23	33	32	0
47	144	10 7007	10 7007	32 0823	24 8051	35 8612	25	26	45	0

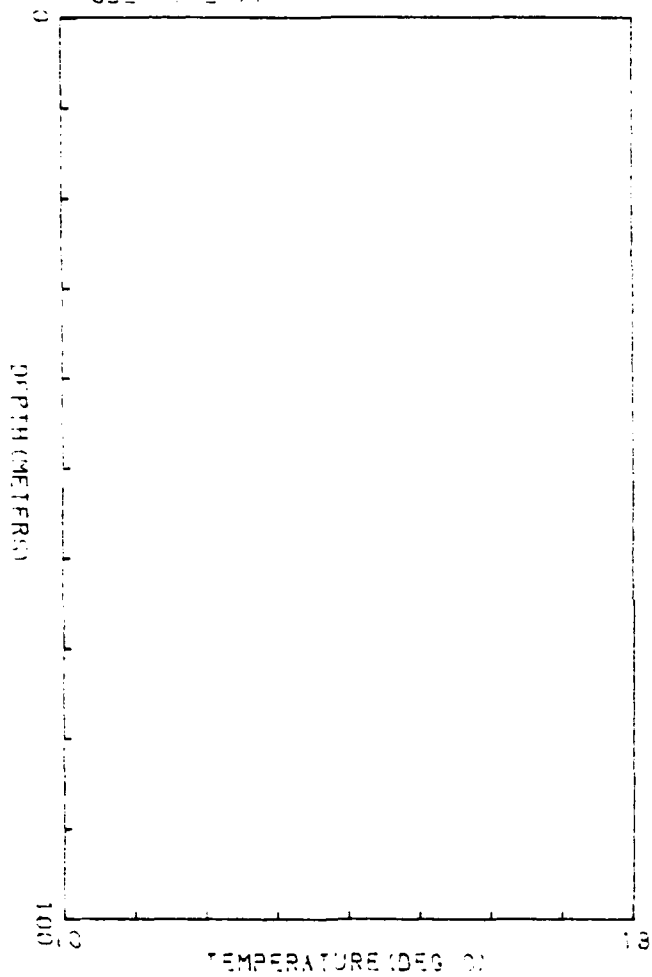
MAXIMUM DEPTH OF CAST = 47.00M



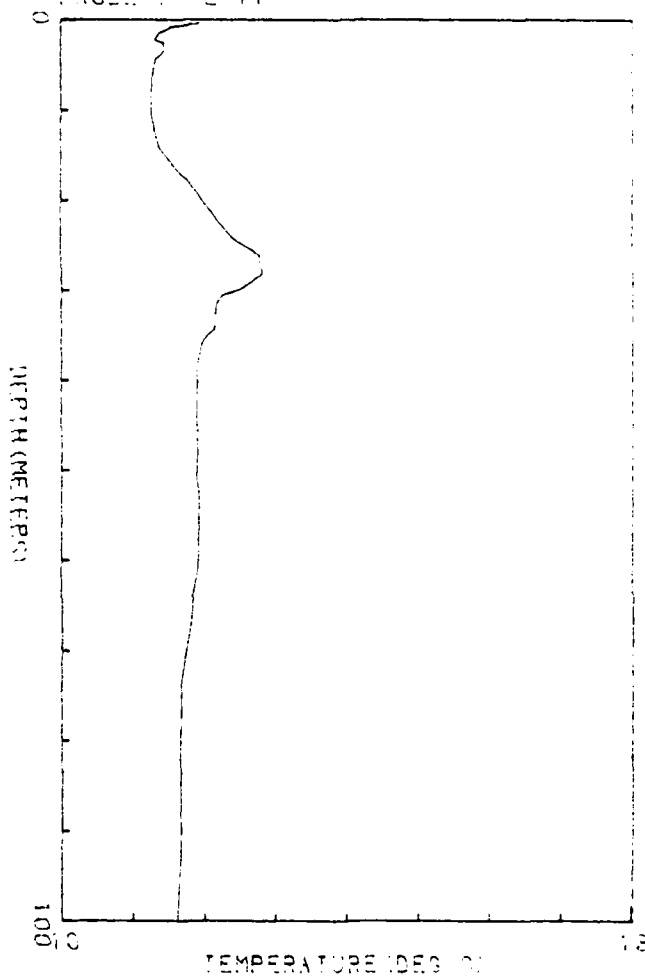
#### APPENDIX C. PLOTS OF XBT DROPS

All the XBT's were hand digitized from the original charts and then replotted using the standard temperature and depth conversions of the Sippican Corporation, Marion, Mass. Drops 7 to 36 are included.

KBT PROFILE # 7  
 TIME: 1981 100 04.46Z  
 POSITION: 40 48.50 N 69 18.00 W  
 PROBE TYPE 11



KBT PROFILE # 8  
 TIME: 1981 101 10.12Z  
 POSITION: 40 47.10 N 69 18.00 W  
 PROBE TYPE 11

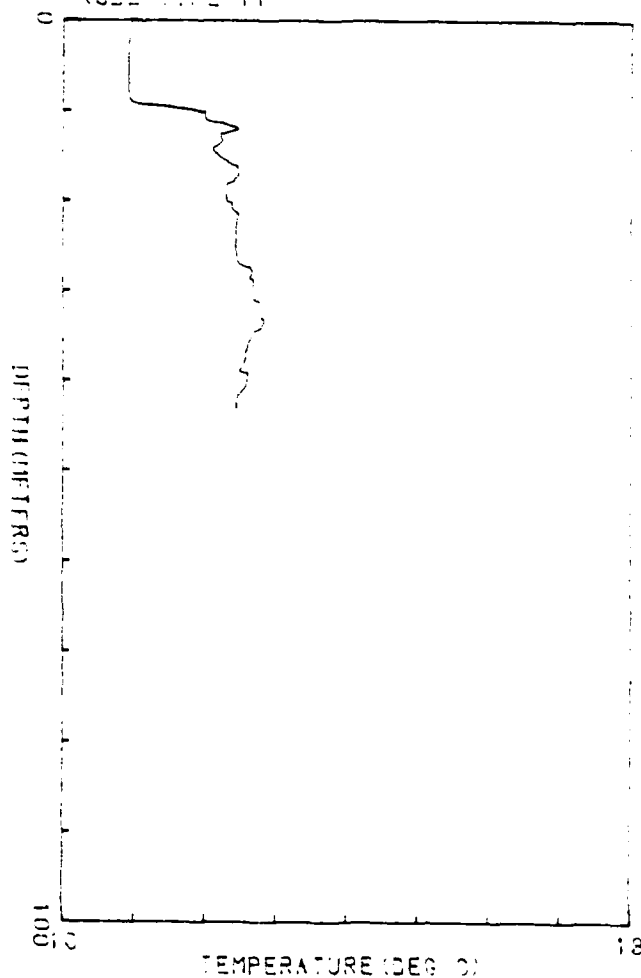


KBT PROFILE # 9

TIME: 1982 192 12.52

POSITION: 40 48.96 N 69 19.04 W

PROBE TYPE 11

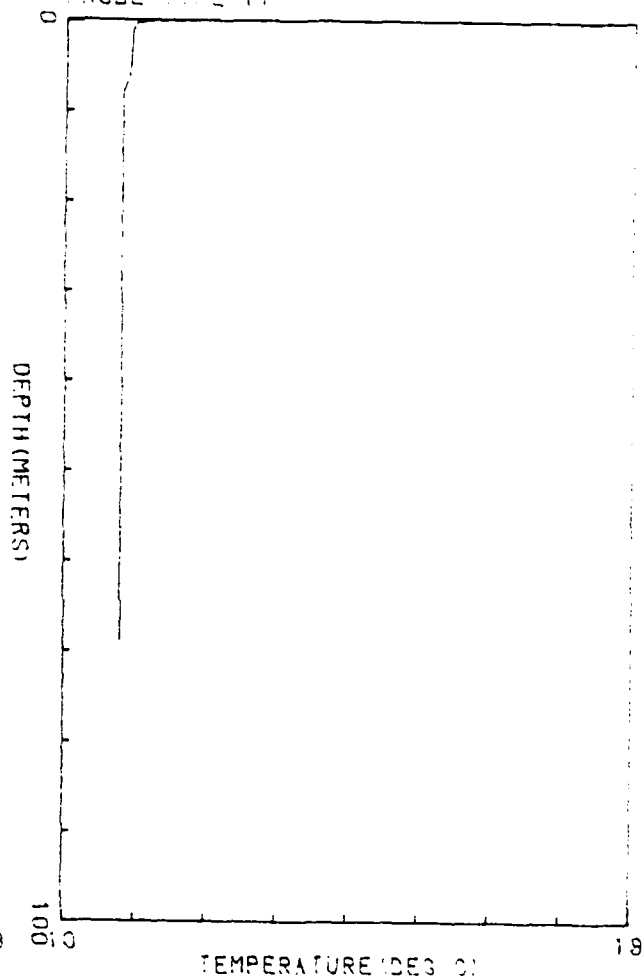


KBT PROFILE # 10

TIME: 1982 192 18.45Z

POSITION: 40 49.90 N 69 18.94 W

PROBE TYPE 11

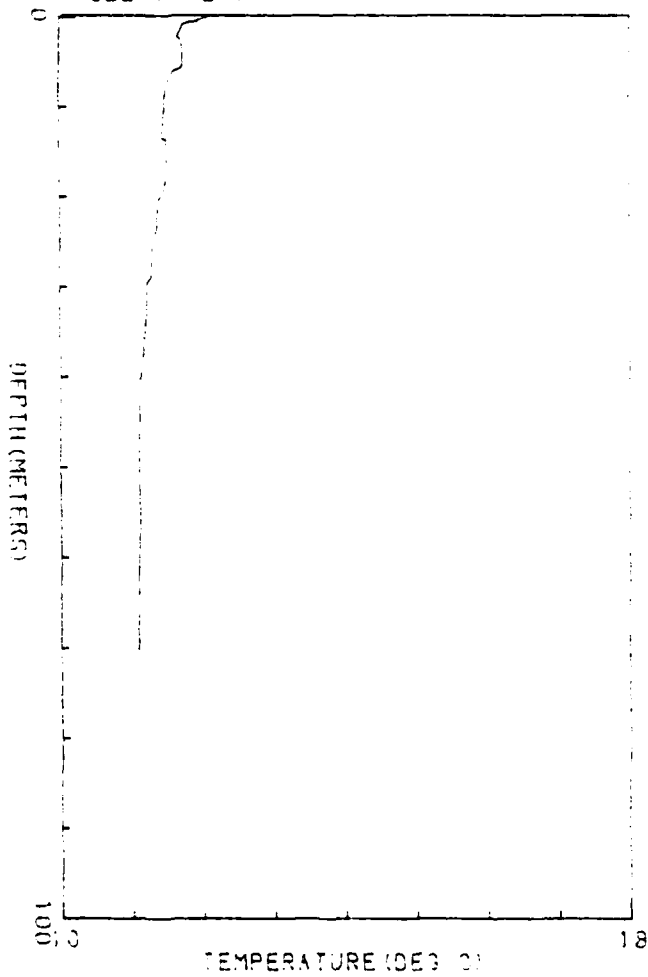


# XBT PROFILE # 11

TIME: 1992 193 18.15Z

POSITION: 40 50.00 N 69 16.79 W

PROBE TYPE 11

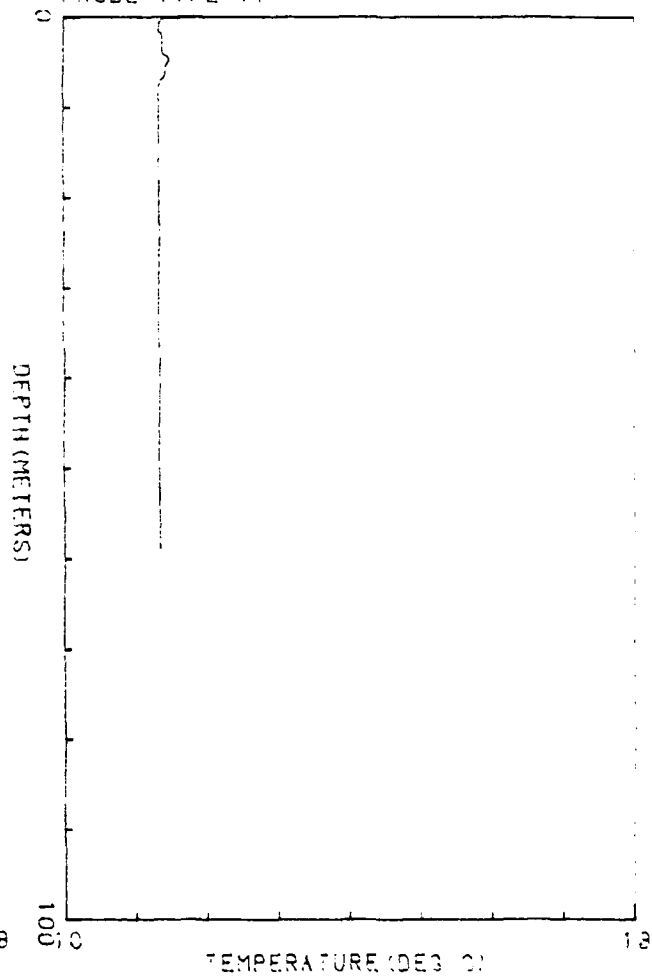


# XBT PROFILE # 12

TIME: 1992 194 18.10Z

POSITION: 40 49.91 N 69 34.04 W

PROBE TYPE 11

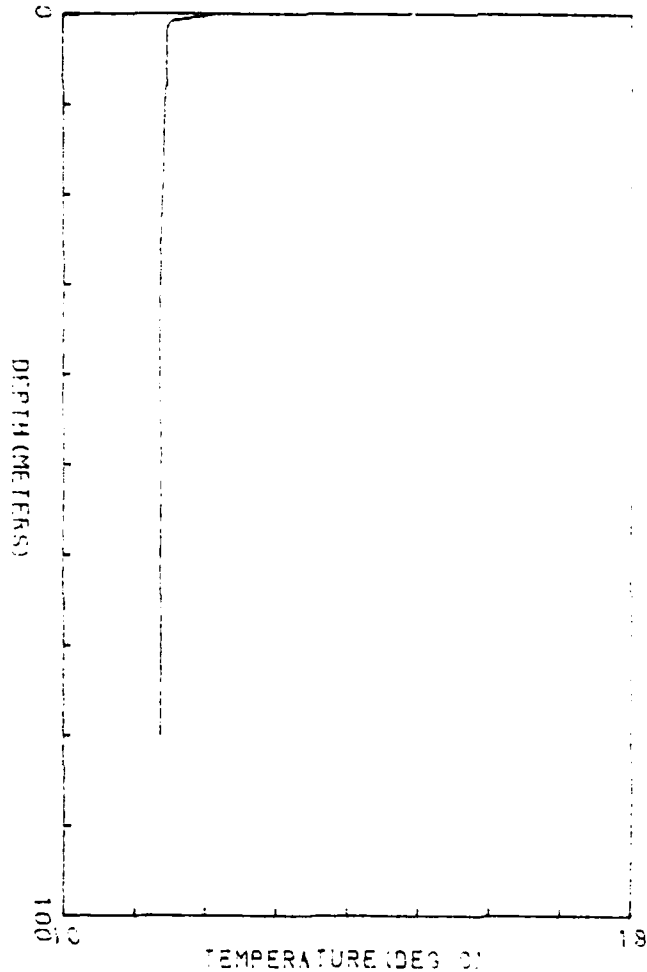


# KBT PROFILE # 13

TIME: 1982 125 15:15Z

POSITION: 40 47.42 N 69 21.73 W

PROBE TYPE 11

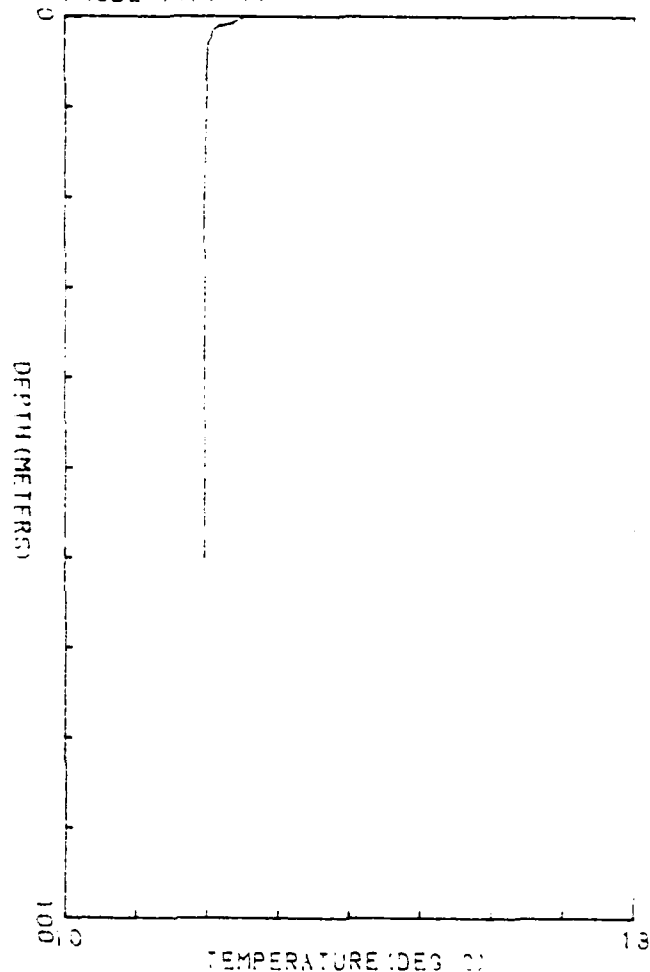


# KBT PROFILE # 14

TIME: 1982 125 17:00Z

POSITION: 40 53.71 N 69 30.91 W

PROBE TYPE 11

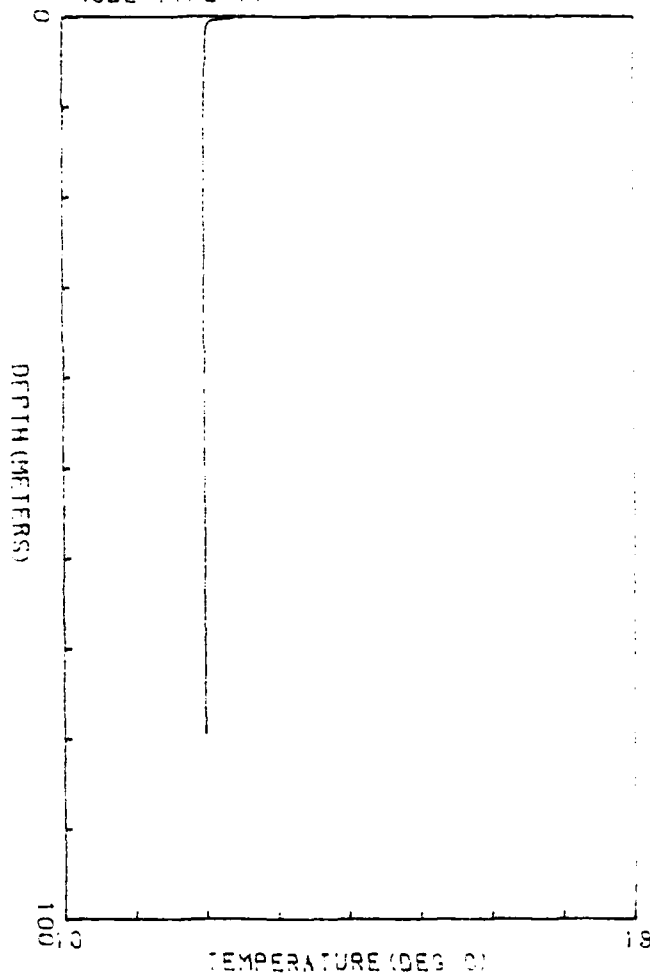


XBT PROFILE # 15

TIME: 1982 198 17.45Z

POSITION: 40 52.50 N 69 30.00 W

PROBE TYPE 11

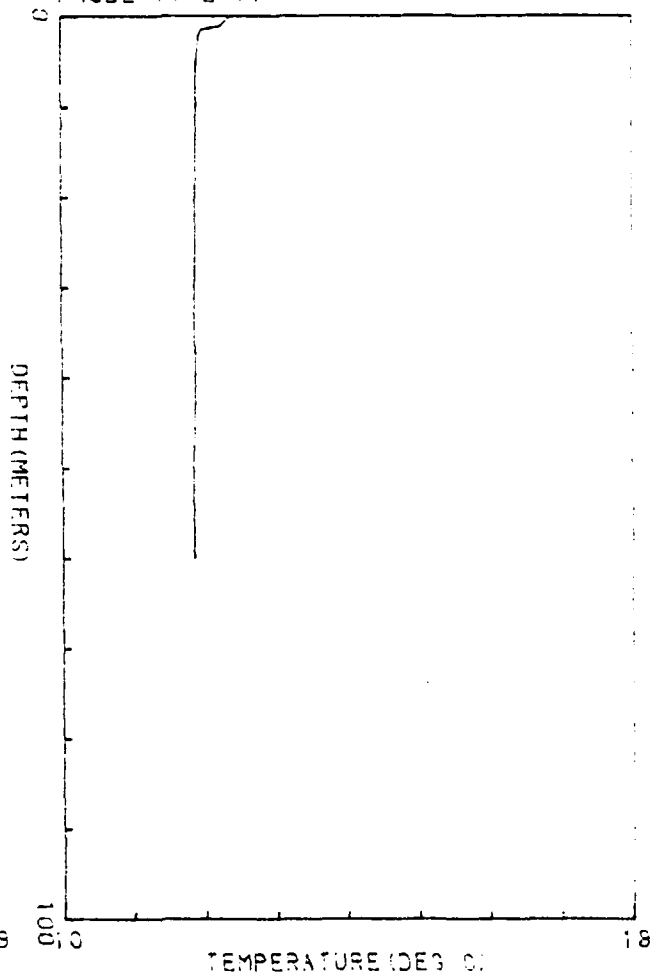


XBT PROFILE # 17

TIME: 1982 198 18.02

POSITION: 40 50.50 N 69 30.19 W

PROBE TYPE 11

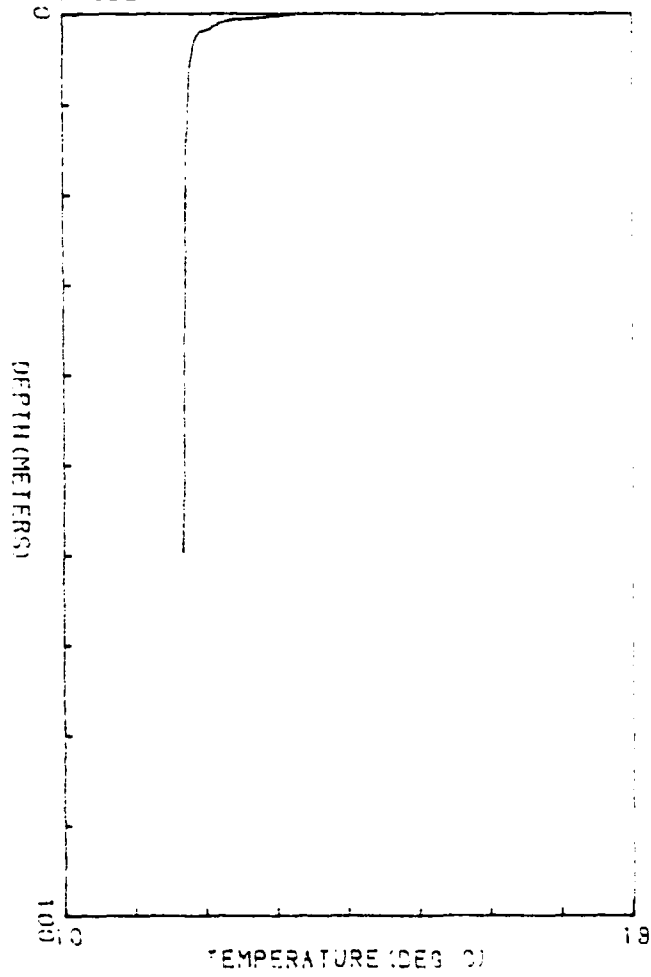


KBT PROFILE # 18

TIME: 1981 198 18:15Z

POSITION: 40 48.10 N 60 30.19 W

PROBE TYPE 11

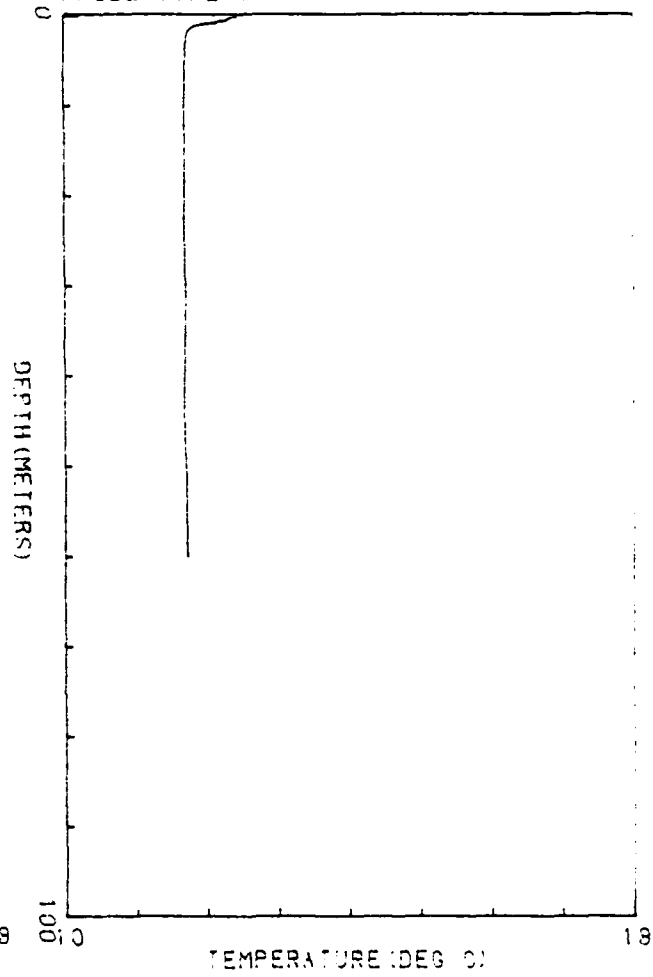


KBT PROFILE # 19

TIME: 1982 198 18:30Z

POSITION: 40 48.50 N 69 29.25 W

PROBE TYPE 11

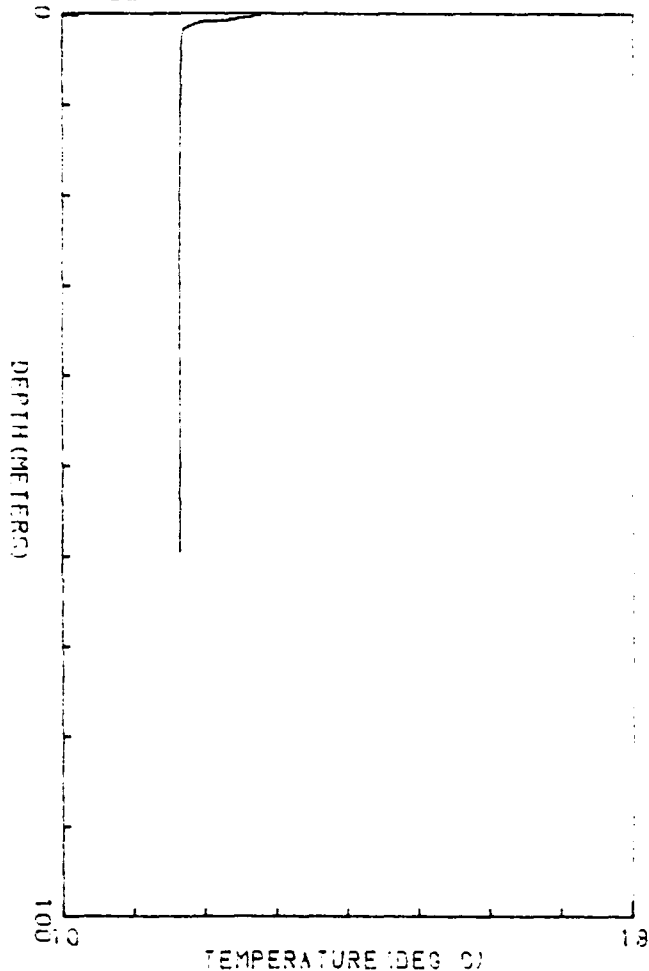


# XBT PROFILE # 20

TIME: 1992 199 13:45Z

POSITION: 40 44.80 N 69 29.93 W

PROBE TYPE 11

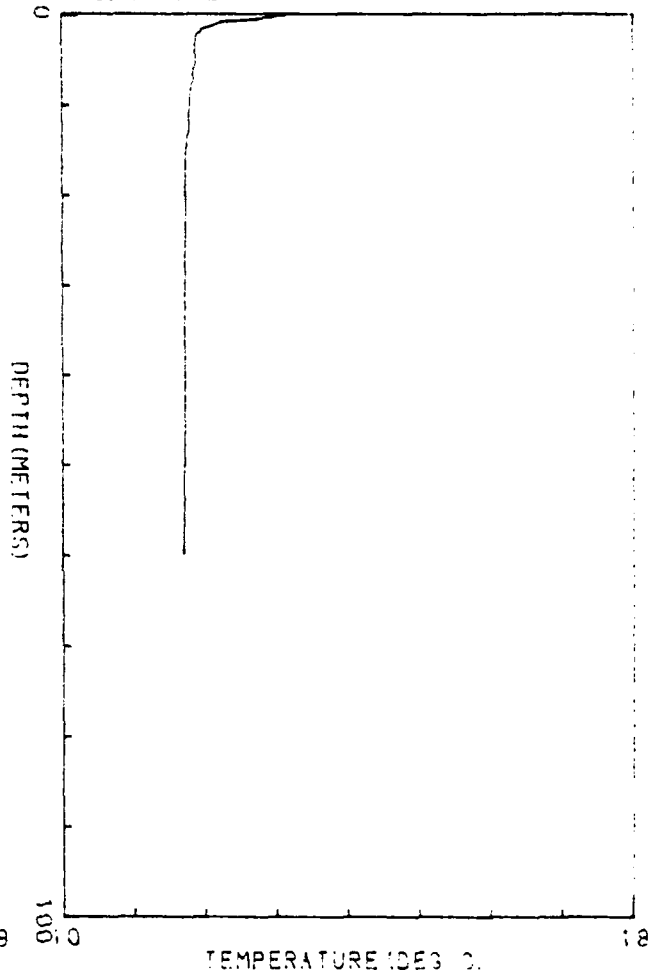


# XBT PROFILE # 21

TIME: 1992 198 19:02Z

POSITION: 40 42.80 N 69 30.00 W

PROBE TYPE 11



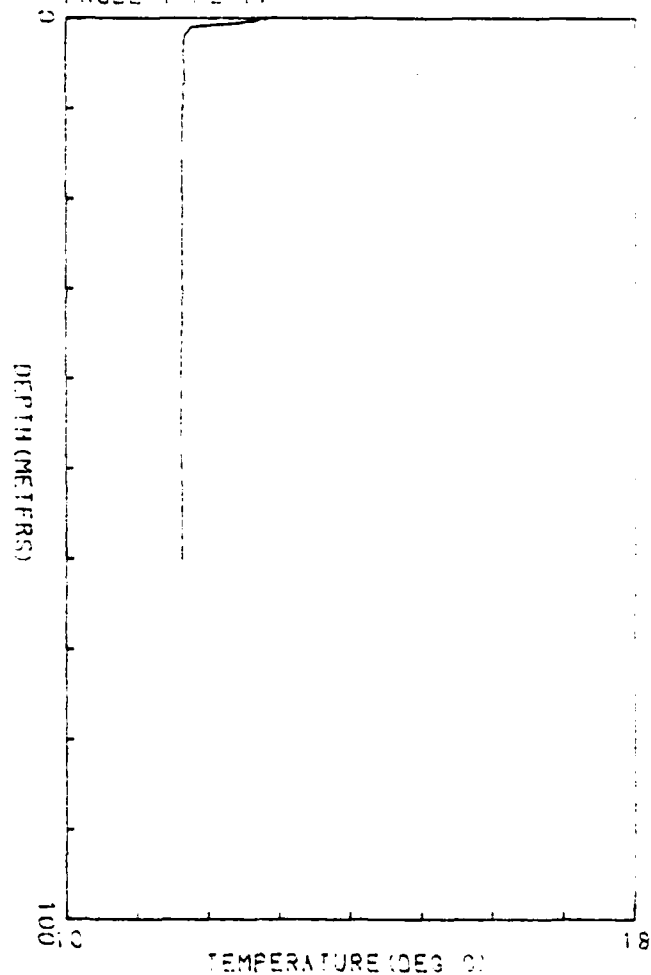


KBT PROFILE # 22

TIME: 1981 19P 19.15Z

POSITION: 40 41.00 N 69 19.92 W

PROBE TYPE 11

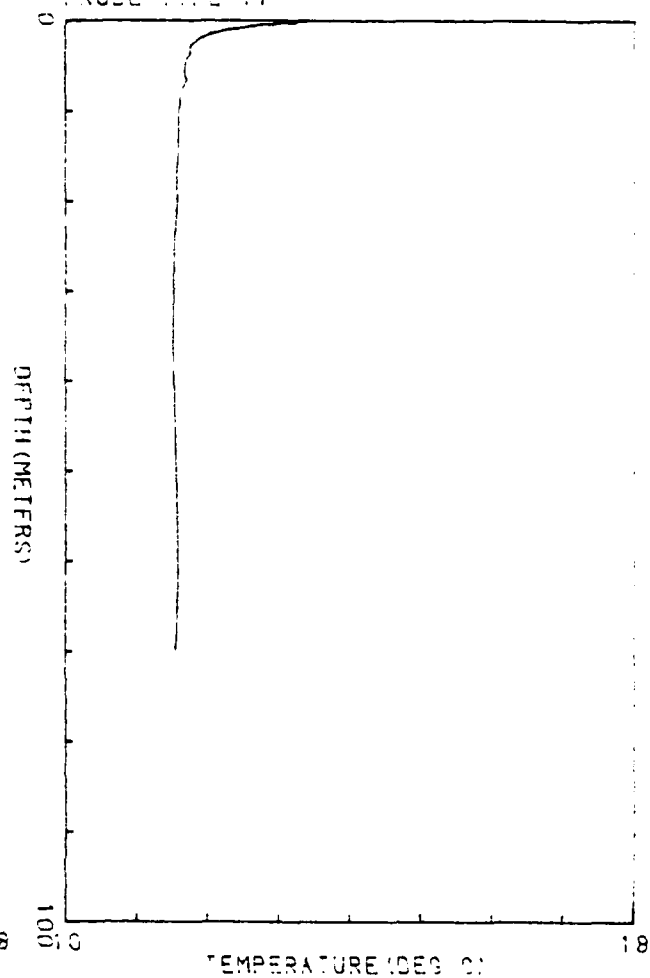


KBT PROFILE # 23

TIME: 1981 19P 19.30Z

POSITION: 40 40.00 N 69 19.92 W

PROBE TYPE 11

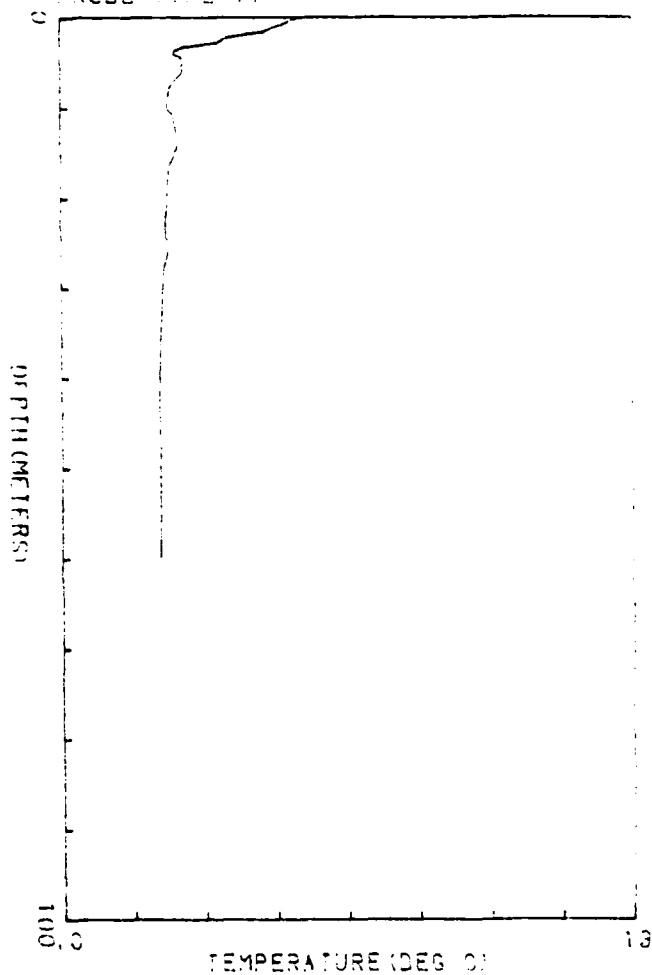


KBT PROFILE # 24

TIME: 1981 138 13:55Z

POSITION: 40 19.70 N 69 29.80 W

PROBE TYPE 11

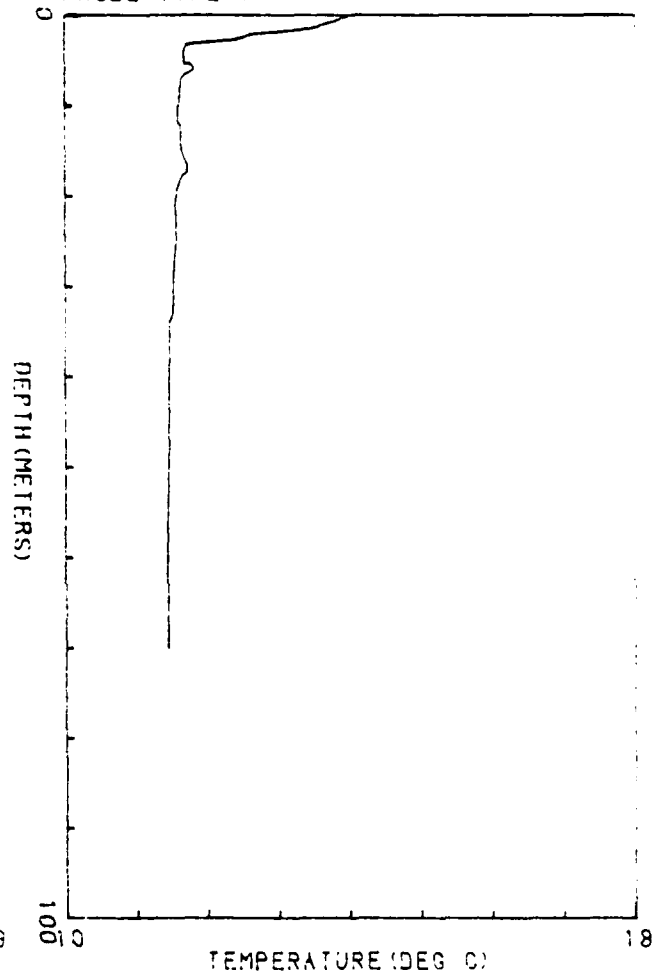


KBT PROFILE # 25

TIME: 1982 199 04:10Z

POSITION: 40 42.40 N 69 29.80 W

PROBE TYPE 11

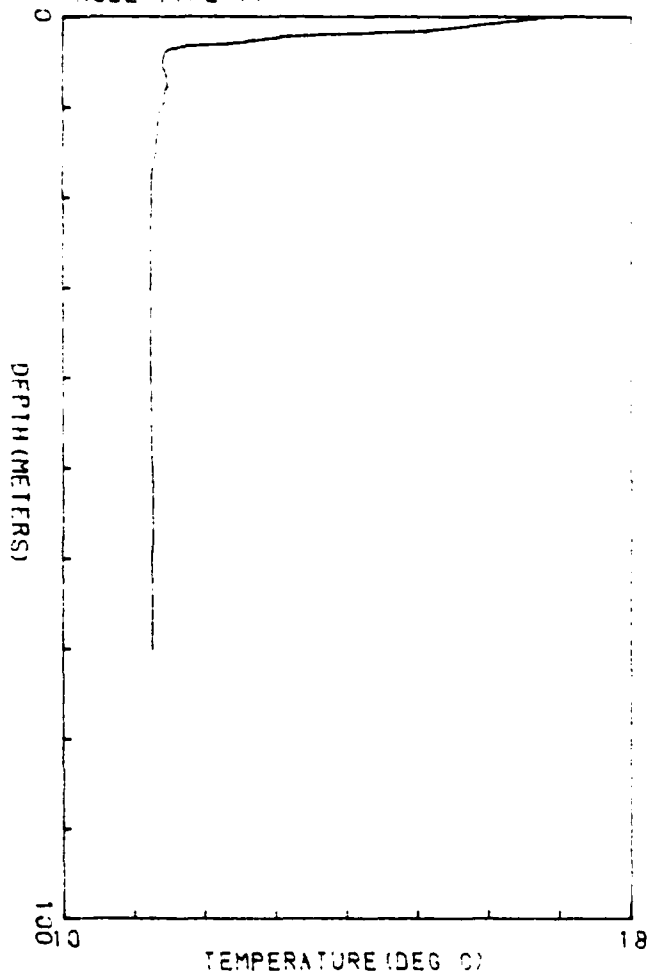


XBT PROFILE # 26

TIME: 1982 199 0125Z

POSITION: 40 43.30 N 69 29.80 W

PROBE TYPE 11

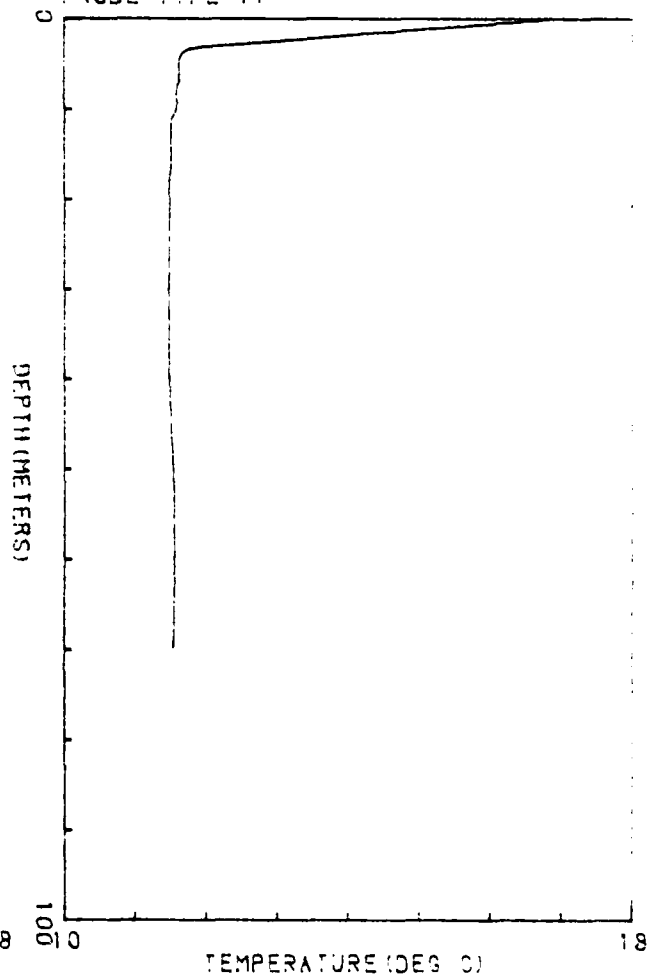


XBT PROFILE # 27

TIME: 1982 199 0135Z

POSITION: 40 44.80 N 69 29.80 W

PROBE TYPE 11

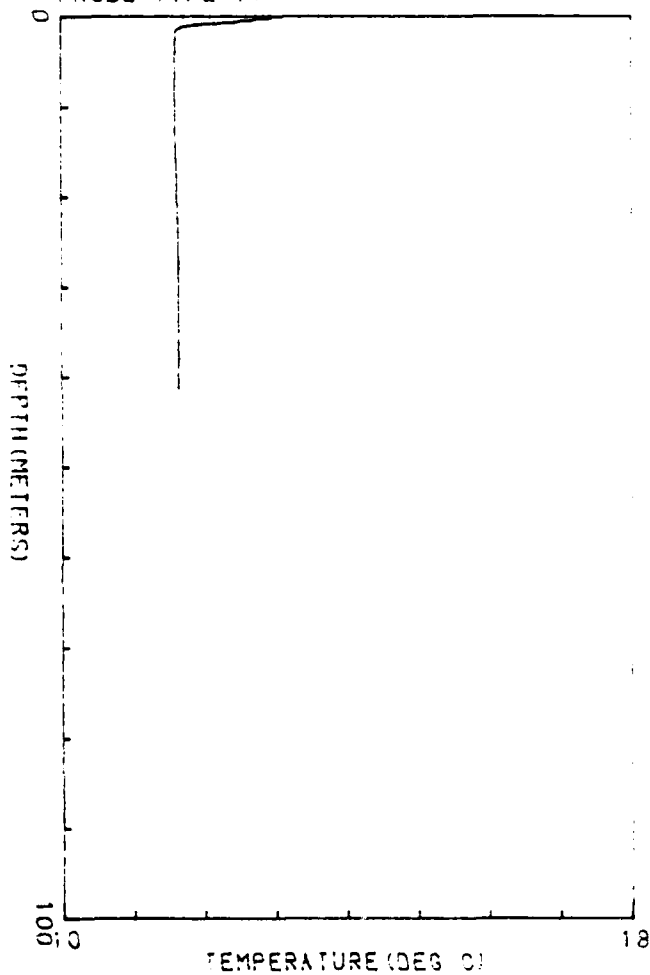


XBT PROFILE # 28

TIME: 199 0 50: 02

POSITION: 40 46.00 N 69 29.00 W

PROBE TYPE 11

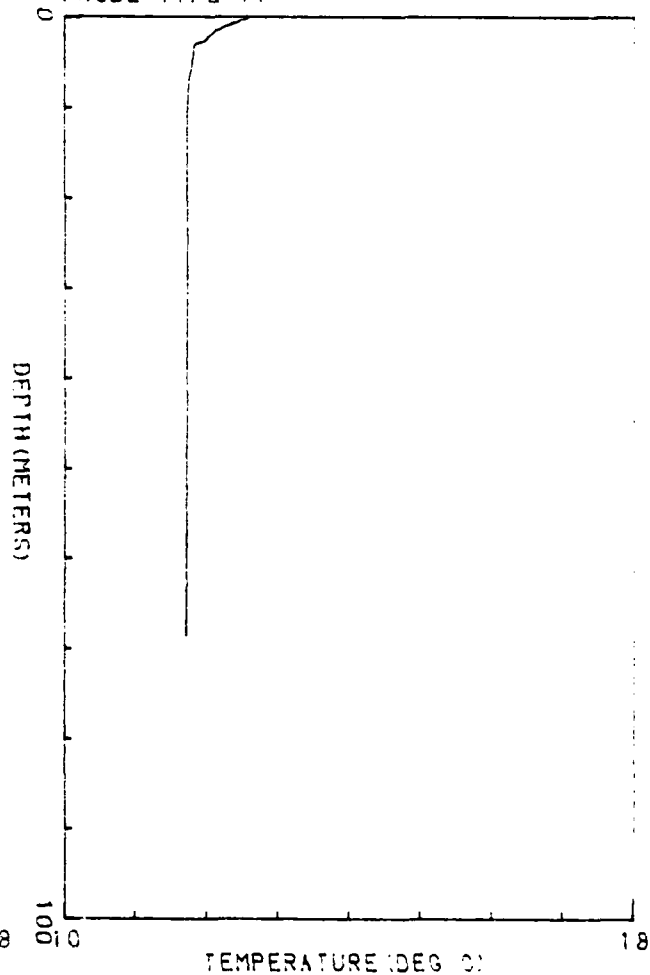


XBT PROFILE # 29

TIME: 199 1 51: 02

POSITION: 40 48.30 N 69 29.40 W

PROBE TYPE 11

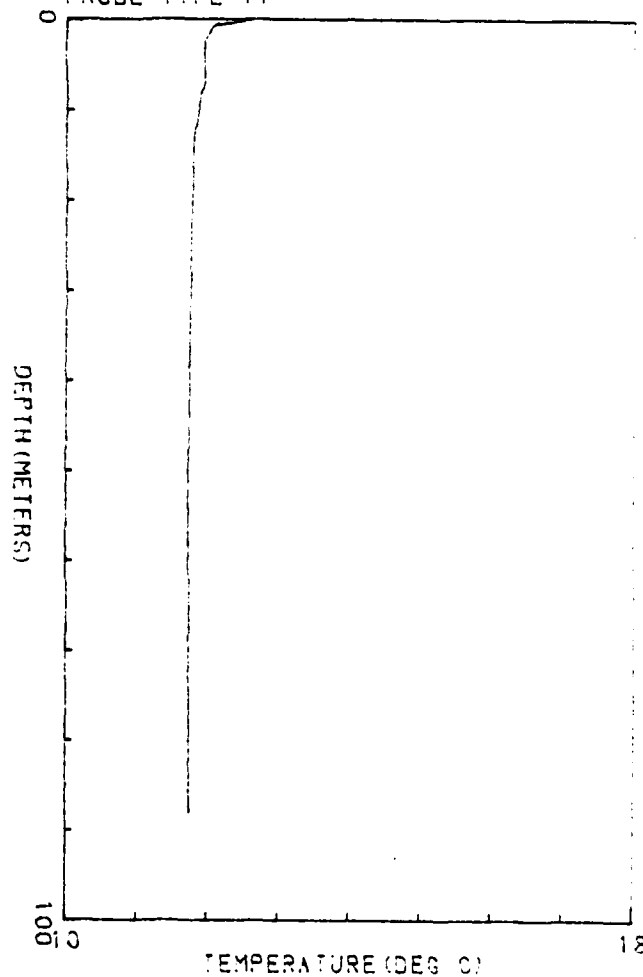


XBT PROFILE # 30

TIME: 199 1 20:02

POSITION: 40 50.14 N 69 29.40 W

PROBE TYPE 11

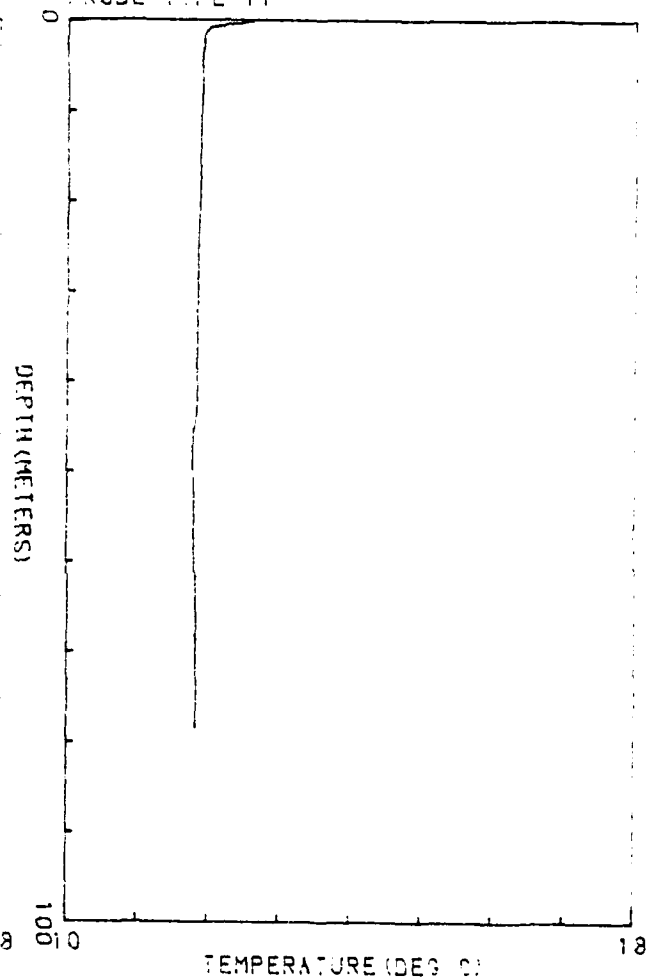


XBT PROFILE # 31

TIME: 199 1 35:02

POSITION: 40 41.90 N 69 29.40 W

PROBE TYPE 11

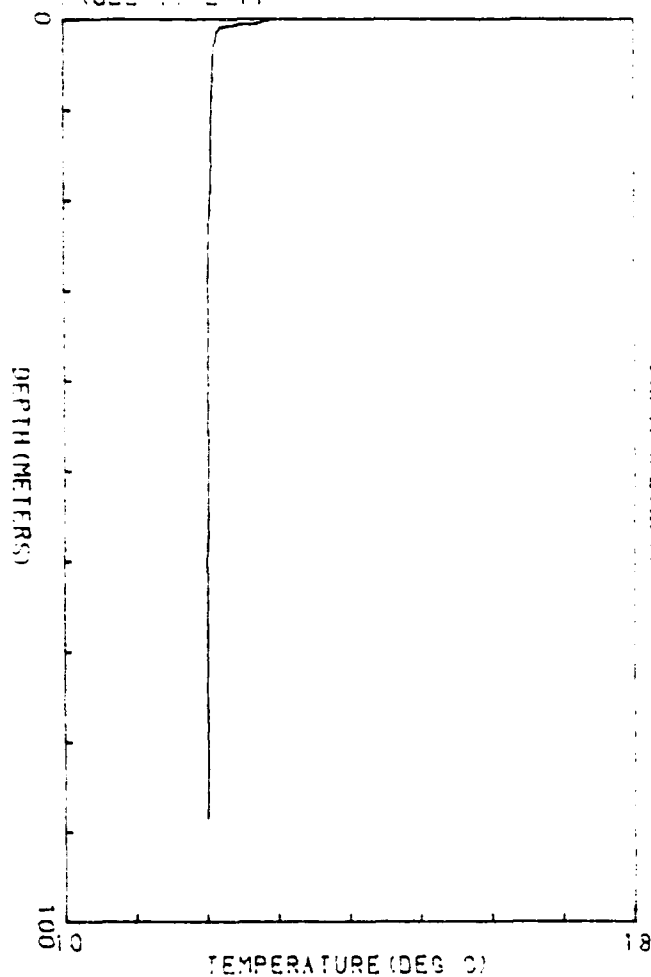


# XBT PROFILE # 32

TIME: 199 1 45: 0Z

POSITION: 40 53.00 N 69 29.50 W

PROBE TYPE 11

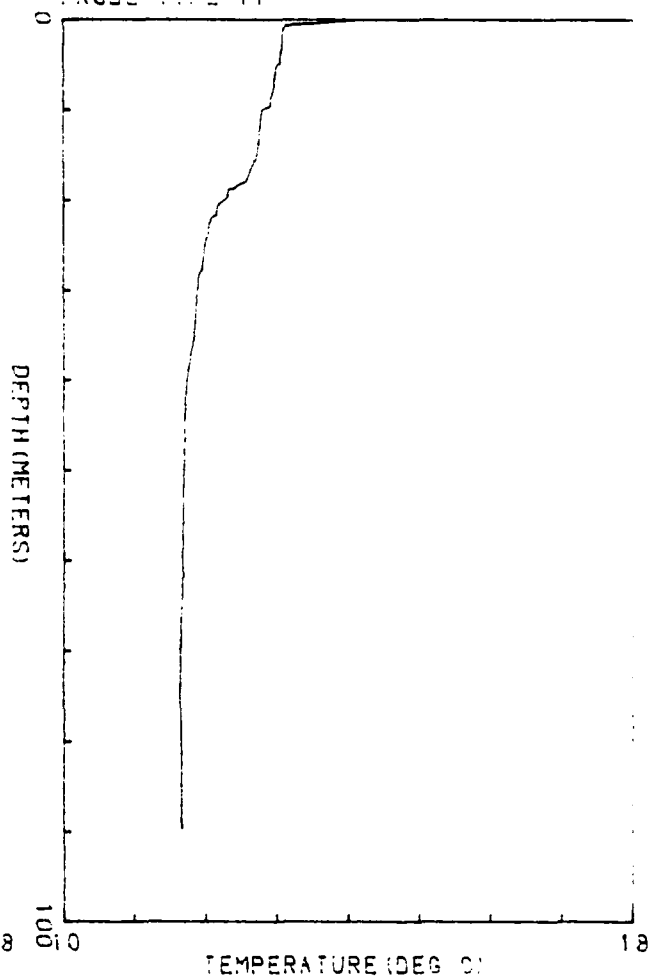


# XBT PROFILE # 33

TIME: 199 20 25: 0Z

POSITION: 40 50.70 N 69 7.00 W

PROBE TYPE 11

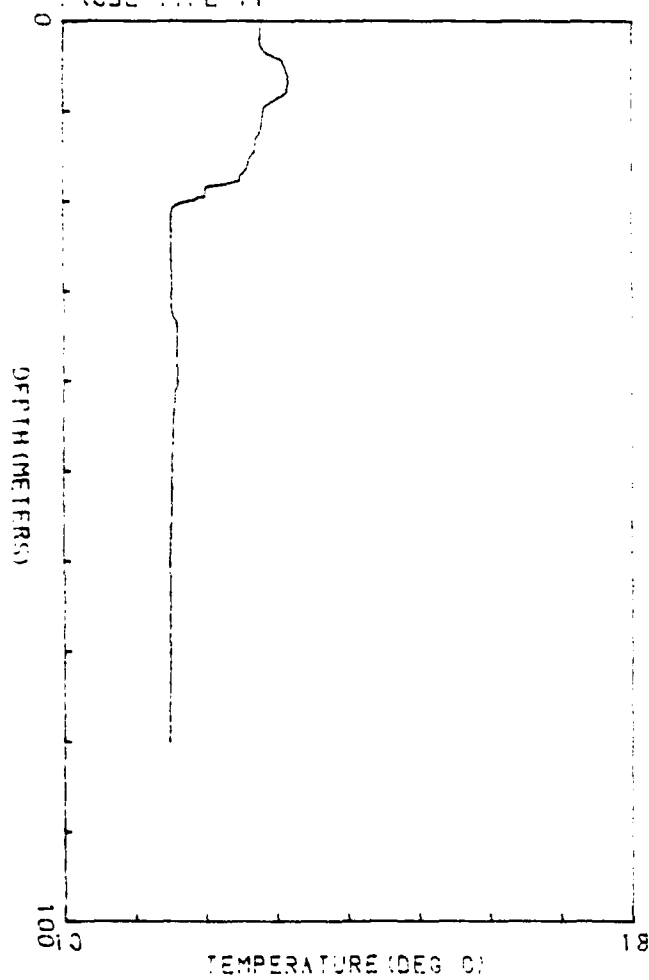


XBT PROFILE # 34

TIME: 200 3 5: 02

POSITION: 40 57.10 N 69 6.00 W

PROBE TYPE 11

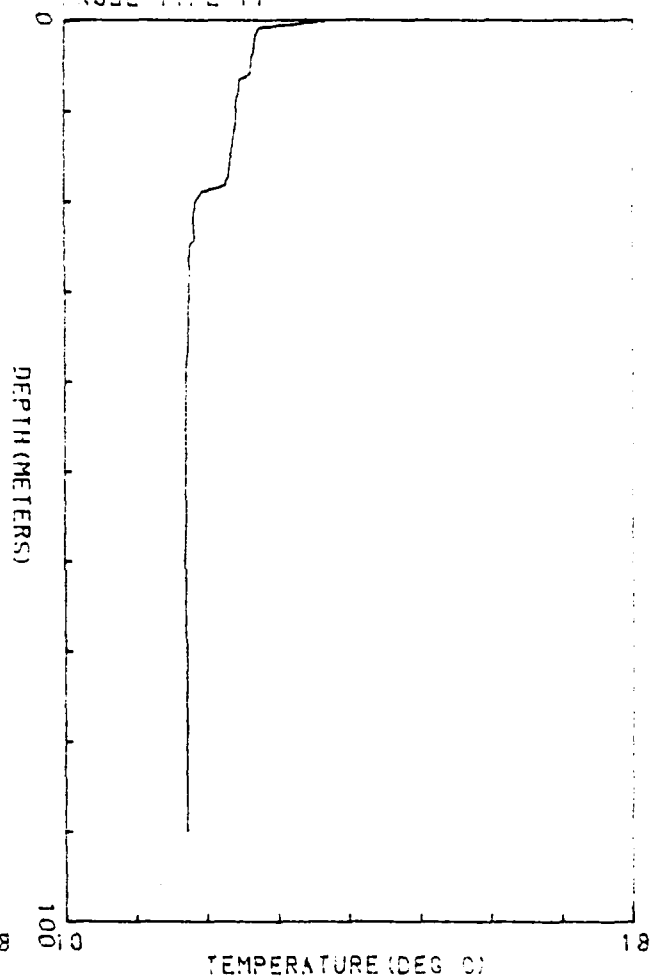


XBT PROFILE # 35

TIME: 200 12 0: 02

POSITION: 40 50.50 N 69 11.20 W

PROBE TYPE 11

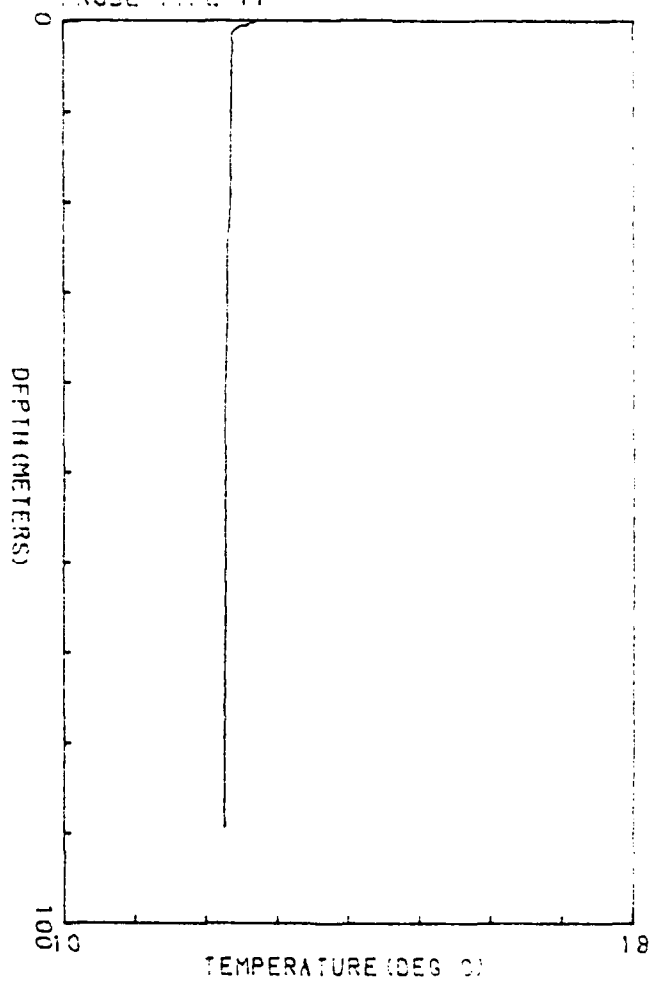


XBT PROFILE # 36

TIME: 202 13 04 32

POSITION: 40 49.10 N 69 33.70 W

PROBE TYPE 11





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